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ABSTRACT

A study compared the achievement of students in three Ottawa French programs: early French immersion (EFI), begun in kindergarten; middle French immersion (MFI), begun in fourth grade; and late French immersion (LFI), begun in sixth grade, with students in core French instruction since kindergarten. Extensive testing and data-collection investigated oral and written French production skills, achievement in grades 6 and 8 for two cohorts and for students taking the test in both grades, age and program differences in mastery of French verb skills, language-related activities and pedagogic patterns related to program type, student progress on standardized tests, and enrollment patterns. Sample classes were observed and tested in both the classroom and the language laboratory. The report describes the study's methodology and correlates test and classroom observation results. An analysis indicates the following: the performance of MFI students was between that of the EFI and LFI students; the current policy of student enrollment in grade nine French language programs is appropriate; eighth grade performance was better than sixth grade performance in each program; additional verb usage research is needed; the programs differ in pedagogic orientation; and introduction of MFI has not reduced EFI or LFI enrollments. Measurement instruments, data, and a brief reference list are appended. (MSE)

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1990 MIDDLE IMMERSION REVIEW: A COMPARISON OF OTTAWA BOARD OF EDUCATION STUDENTS IN THREE FRENCH IMMERSION PROGRAMMES IN GRADE 6 AND GRADE 8

Research Paper 90-01A

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September 1990

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1990 MIDDLE IMMERSION REVIEW: A COMPARISON OF OTTAWA BOARD OF EDUCATION STUDENTS IN THREE FRENCH IMMERSION PROGRAMMES IN GRADE 6 AND GRADE 8

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1990 MIDDLE IMMERSION REVIEW: A COMPARISON OF OTTAWA BOARD OF EDUCATION STUDENTS IN THREE FRENCH IMMERSION PROGRAMMES IN GRADE 6 AND GRADE 8

INTRODUCTION

Historical Background

Since the early 1970's, the Ottawa Board of Education has offered two entry points to a French Immersion Programme. In the "Early French Immersion" (EFI) option, students begin with totally French instruction in kindergarten and grade 1, followed by about 80 per cent of the time in French up to grade 5. In grades 6, 7 and 8, instruction is about half in English and half in French, so that by the end of elementary school, students have accumulated about 5580 hours of French instruction, as illustrated in Table 1.

The "Late French Immersion" (LFI) programme involves total French instruction in grade 6 after a programme of Core French from kindergarten to grade 5. Instruction in grades 7 and 8 is about half English and half French. By the end of elementary school, students have accumulated about 2490 hours of French (see Table 1).

In September 1985 a programme of "Middle French Immersion" (MFI), starting at the grade 4 level, was initiated. Instruction was to be in French in the Junior Division, except for English Language Arts (about 20 per cent of the day). As in the other immersion options, approximately half of the instructional time was spent in each language in grades 7 and 8, so that about 3510 hours of French instruction had been received by the end of elementary school. Table 1 and Figure 1 show the time in French for the three immersion programmes up to grade 8.

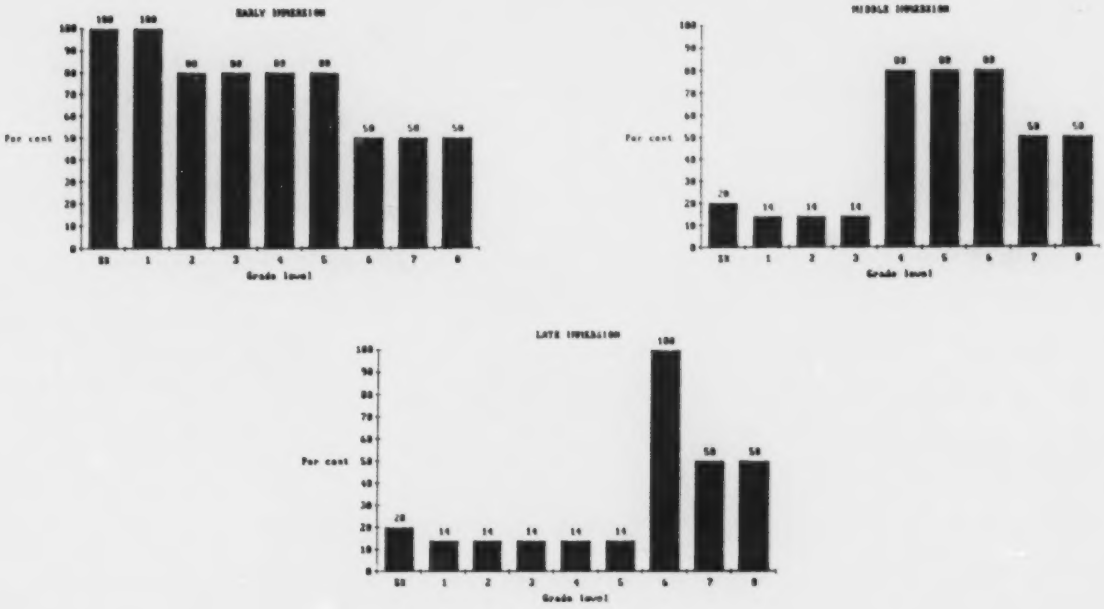
TABLE 1

TIME SPENT IN FRENCH BY STUDENTS IN OBE IMMERSION PROGRAMMES

Grade	Early immersion		Middle immersion		Late immersion	
	% in French	Cum. hours	% in French	Cum. hours	% in French	Cum. hours
K	100	450	20	90	20	90
1	100	1350	14	210	14	210
2	80	2070	14	330	14	330
3	80	2790	14	450	14	450
4	80	3510	80	1170	14	570
5	80	4230	80	1890	14	690
6	50	4680	80	2610	100	1590
7	50	5130	50	3060	50	2040
8	50	5580	50	3510	50	2490

FIGURE 1

PROPORTION OF THE DAY IN FRENCH FOR ELEMENTARY STUDENTS
IN THREE OBE IMMERSION PROGRAMMES



The first MFI cohort consisted of one class in each of two schools, or about 60 students. During the following years, the programme expanded to three and then to five schools, with the numbers entering the programme increasing to around 100. By the 1989-90 school year, a total of about 330 students in five grade levels were involved in the programme and the first cohort had reached grade 8.

During the initial year of the MFI programme, an evaluation was conducted by the Research Centre (Research Report 86-08), focusing on the gain in French proficiency during the first year in the programme. In 1987-88, a further study was carried out (Research Paper 88-08) to determine the proficiency level of students after three years in the programme and to compare it with that of early immersion students. As well, the achievement of students in the third cohort was examined and compared with that of the first cohort at the end of grade 4, and information was collected about the background of pupils entering MFI. The 1988 evaluation was repeated in the following year, using the same French test (Research Paper 89-07).

Previous Research Findings

On a French reading test taken at the end of grade 4, the first MFI cohort had a mean score which was at about the 30th percentile relative to the grade 3 EFI norming group. The MFI listening test mean score fell at the 60th percentile relative to the grade 1 EFI norming group. This represented a significant gain in proficiency from the beginning of the year. The third and fourth MFI cohorts scored similarly to the first on these tests.

French listening comprehension and several aspects of French production were measured at the end of grade 6 for the first two MFI cohorts. For the first cohort, there were differences between MFI and EFI groups in listening comprehension, in the use of verb tenses in both oral and written work, and in performance on a cloze test. Scores for the two groups were similar on ratings of fluency, pronunciation, appropriateness of style, and strategic competence, as well as on two scores for vocabulary and counts of errors in prepositions and in grammatical spelling. For the second cohort, results were generally similar, with minor variations.

On an English reading test taken by all OBE students in grade 3, pupils who entered MFI in grade 4 were found to score similarly to students in EFI and higher than those who remained in the English programme. On a grade 6 reading test also, the groups in all immersion options had means higher than those of the English programme group. Both the first and second MFI cohorts and their EFI comparison groups had similar scores on standardized tests of English reading and mathematics that they had taken up to grade 6.

Information obtained from questionnaires to students in the third MFI cohort and their parents indicated that fewer than 15 per cent of this group had at one time been in the EFI programme. Families of MFI students tended to include a higher than average proportion of adults with post-secondary education and professional or managerial careers. The most frequently cited reason for choosing MFI rather than another immersion programme was a desire for the child to receive a good grounding in English in the Primary Division before starting education in a second language. Most parents saw their children as progressing well in MFI and having a generally positive attitude towards school.

Organization of This Report

The following report first describes the purpose, procedures, sample and instruments used in the 1990 project, then presents the data collected during this project. A summary and discussion of the findings are presented at the end of the report. Throughout the document, tables showing essential results are integrated into the text, while supplementary graphs and tables are found in Appendices C and D and summarized in the text.

THE 1990 PROJECT

Purpose

The end of elementary school was felt to be a critical time to examine the first MFI cohort again, in relation to students from both the early and late immersion programmes. An extensive testing and data-collection project was undertaken, with the following objectives:

1. to examine and compare the oral and written French production skills of students in the three immersion programmes as they prepare to enter high school

2. to compare achievement of grade 6 and grade 8, both for the two cohorts and for those students who had taken the test in both grades

3. to investigate the extent to which students of different ages and in different programmes master French language skills involving use of verb tenses

4. to describe the language-related activities in grade 6 and 8 classes in the three immersion programmes and to identify any patterns that emerge in the pedagogic orientation of the various classrooms as these may relate to specific programmes and grade levels

5. to monitor the progress of MFI students in standardized tests administered as part of the board's City-Wide Testing Programme

6. to gather information about enrolment in immersion in the OBE and particularly the movement of students into and out of MFI

Procedures

The 1990 evaluation involved collaboration between staff of the Research Centre and a graduate student at the Second Language Institute at the University of Ottawa The cooperation of FSL staff of the OBE Programme Department and of all the teachers and principals concerned is also acknowledged. To achieve some of the objectives above, it was decided to use the same test of French production as was used in the previous two years. In addition, some new measures of written and oral verb usage were to be developed and an examination of classroom activities carried out.

After the sample classes had been selected, all teachers and principals concerned were invited to a presentation by the investigators, outlining what the project entailed. The three segments of the research project were:

1. Classroom observations. Sample classes were to be observed on two occasions, one in late February and one in early April. At that time, samples of students' written work were also to be collected.

2. In-school testing. Between March 20 and April 18, testers were to visit each sample classroom to administer most parts of the French proficiency test used previously with grade 6 students.

3. Language Lab testing. In mid April, the final section of the French production test was to be completed in the Language Lab at the University of Ottawa. In addition, students were to take two tests developed for the purpose of this project, one an oral sentence repetition task, the other a written exercise.

The researcher observed two French language arts lessons in eleven of the fourteen classrooms on two separate occasions approximately six weeks apart. It was not possible to observe a second French language arts lesson in three classrooms due to unavoidable circumstances. Lessons with a focus on French language usage and related activities were selected; the observation period varied from 45 to 90 minutes depending on the length of the lesson.

Observations were recorded using a scheme designed to classify the various classroom events according to specific categories and to calculate the percentage of classroom time dedicated to each category. Due to the limited number of observations carried out in this study, quantitative analyses were not performed. Rather, "snapshot" descriptions of classroom activities were developed according to the different categories of this scheme. Clearly, a more definitive report would be preferable, but given the impossibility of a quantitative study, these descriptions and analyses provide some insight into events occurring at the classroom level.

Because of a 26-day strike by OBE Elementary Teachers in April and May, only two of the sample classes had the opportunity to visit the language lab. Hence only very limited results are available on some of the segments of the testing to be done at the lab. There was an opportunity late in the school year for the grade 8 classes to do the written exercise.

Scoring of all the written exercises was carried out by the investigators, who were familiar with the tests and scoring procedures and who were francophone or had native-like fluency. The taped oral exercises were scored by a native speaker of French with training in linguistics.

Tracing information concerning student movement into and out

testing period. Scores on standardized tests of English reading and mathematics were also gathered for all students in the sample.

All information concerning sample students was amalgamated, including test scores from 1988 and 1986, where available. In general, statistical analyses were carried out using the version of SPSS for microcomputer and procedures for determining frequencies, descriptive statistics, correlations and one-way analysis of variance. Differences between groups were tested for statistical significance using a chi-square test, t-test or analysis of variance procedure (Scheffé multiple comparison test).

Sample

All MFI students in grades 6 and 8 were tested. At grade 8, this involved two classes in two schools (36 students), and at grade 6, four classes in three schools (79 students).

For comparison, two classes at each grade level were selected from each of the other two immersion options (EFI and LFI). For each grade and programme, the two comparison classes were chosen so that together they included students from different geographic areas of the city and so that they matched fairly closely, on average, the reading scores of the MFI group to which they would be compared. Classes known to have had a major disruption during the year (e.g. a teacher on extended sick leave) were avoided. Table 2 gives information about the number of schools, classes, and students in the groups studied.

TABLE 2

NUMBER OF SCHOOLS, CLASSES AND STUDENTS
IN STUDY SAMPLE: OTTAWA BOARD OF EDUCATION, 1990

Grade	Programme	No. schools	No. classes	No. students
Grade 8	EFI	2	2	66
	MFI	2	2	36
	LFI	2	2	54
Grade 6	EFI	2	2	48
	MFI	3	4	79
	LFI	2	2	49
TOTAL		9	14	332

Instruments

French proficiency test: "Bienvenue au camp de la gélinotte". The instrument used previously and again selected for use in this project was the evaluation kit entitled "Bienvenue au camp de la gélinotte", developed at the Ontario Institute for Studies in Education for use with immersion students in Saskatchewan. Though this test was originally designed for use with grade 6, it was felt that the camping theme would also be suitable for grade 8 pupils and that the nature of the test would make it appropriate for students with a wide range of proficiency. Moreover, having been used previously, it had been found to appeal to the students, it was familiar to testers and scorers, and it permitted comparison with earlier results. Finally, two scales involved the use of verb tenses, a particular interest in this project, as noted above.

The underlying framework for this instrument and its related scoring procedures is the "framework of communicative competence" described by Canale and Swain (1983). According to this model, communicative competence consists of four major components:

1. Grammatical competence includes knowledge of vocabulary items and of rules of pronunciation, spelling, word formation and sentence formation.

2. Sociolinguistic competence involves the extent to which language can be used appropriately to convey communicative functions (inviting, persuading, commanding, etc.), depending on such factors as the topic, the role of the participants and the setting.

3. Discourse competence involves mastery of how to combine sentences and ideas or points of information coherently.

4. Strategic competence is that knowledge of verbal and non-verbal strategies which may be called into play to compensate for insufficient knowledge of grammatical, sociolinguistic or discourse rules.

The kit involves four written and two oral exercises designed to evaluate these areas. Each student writes answers to questions about a picture in the test booklet, writes a composition based on given information and another descriptive composition to cover five specified points, completes a 42-item cloze-type test, retells a story (orally), and takes part with three others in making up a campfire story.

The test manual clearly specifies the aspects of each exercise to be scored. Measures of grammatical competence include a count of preposition errors, a rating for pronunciation, and scores for word formation and grammatical spelling, variety of vocabulary and sophistication of vocabulary. Discourse competence measures

include a count of verb tense sequence errors in both written and oral work and a score based on the number of tasks fulfilled in the composition. A rating on the appropriateness of style provides a measure of sociolinguistic competence and a rating is also given for the use of communicative strategies. The cloze test score gives a measure of overall language proficiency, including grammatical, sociolinguistic and discourse competence. The components of the test and their relationship to each other are described in greater detail in Appendix A.

Verb Cloze Test. A passage of about 600 words was constructed in an attempt to include a variety of verbs in the "présent", "passé composé", "imparfait", and "futur" tenses. Thirty-five verbs were removed from various sentences in the passage. Each verb was written in the infinitive form between parentheses before the blank which replaced it. Students were required to write the verb in the correct tense according to the linguistic and contextual clues of the passage.

The responses were scored on a scale from 0 to 2 with reference to verb form only, as described below:

0 - Inappropriate tense: the verb used is unacceptable (e.g. the present tense is used when the future was required, or the "passé composé" when use of the "imparfait" was obligatory). In cases where either the "passé composé" or the "imparfait" might be acceptable either was taken as the correct response and subject to the other criteria.

1 - Appropriate tense: the verb tense used is clearly that expected but there is a mistake in the form (e.g. the verb is written in the future tense as expected but with a singular ending as opposed to a plural ending, such as "ils sortira" instead of "ils sortiront").

2 - Exact tense: the verb tense used is clearly that expected and there is no mistake with respect to form.

In addition to an overall score out of 70, separate scores are provided to indicate the number of "exact" (completely correct) responses and of "appropriate" responses (correct tense used).

Classroom Observation Instrument. The literature on communicative language teaching emphasizes the importance of such factors as the use of authentic, real-life materials, group-work interaction, opportunities for extended discourse (speaking and writing beyond the sentence-level), a focus on language in meaningful contexts, and a primary concern with the content of a message rather than its linguistic form (Frolich, Spada, and Allen, 1985). In light of the multiplicity of factors which contribute to the instructional process, Allen, Cummins, Mougeon, and Swain (1983) have developed a second language classroom observation instrument the aim of which is to focus upon classroom activities,

to describe the classroom with respect to its communicative or analytic orientation, and to relate these findings to programme outcomes. This scheme, referred to as **COLT** (**Communicative Orientation of Language Teaching**), contains two parts: **Part A** categorizes events at the classroom level, and **Part B** examines the verbal interaction which takes place within these activities. (See Allen, Frolich, and Spada, 1984, for a complete description of this scheme). For the purposes of this study, the categories of **COLT - Part A** only will be considered; a copy of the observation grid is attached as **Appendix B**. The following section provides a brief description of these categories as well as certain modifications that have been made.

1. Activity. This is an open-ended category which allows the observer to write a short description of the activity or activities which occur in a particular lesson.

2. Participant Organization. This category is composed of four features: "Whole Class", "Group Work", "Individual Seat Work", and a combination of "Group Work/Individual Work". "Whole Class" is further subdivided into teacher-student or teacher-class interaction, student-student or student-class interaction, or choral work.

3. Content. This category refers to the subject matter of the activities. The sub-categories of "Content" in **COLT** are as follows: management, explicit focus on language, other topics (range of reference), and topic control. As the classroom management aspect was similar in all classes and represented a very small degree of input, it was decided to disregard this category. The "Other Topics" category refers to a concern with meaning as opposed to specific aspects of language form. "Range of reference" describes the topic in terms of its degree of complexity - "narrow range" refers to the immediate classroom environment and stereotyped exchanges (date, weather, greetings, etc.); "limited range" indicates information beyond the classroom but not conceptually challenging (movies, holidays, school topics, etc.); "broad range" describes more sophisticated topics (public affairs, world events, abstract ideas, academic subject matter, etc.)

4. Student Modality. This category refers to the specific skill or combination of skills involved in a given classroom activity - listening, speaking, reading, and writing. In the original **COLT** evaluation scheme, these are reported in percentage of time devoted to each skill. For the purposes of this study, in place of a quantitative analysis, the researcher has focused upon the relationship between the nature of the specific activity and the skills that were involved. This relationship is described with reference to an analytic, communicative or combined analytic-communicative distinction discussed among approaches to language teaching

(Allen, 1984). An analytic approach encourages the development of speech habits and a knowledge of basic sentence structure and vocabulary. A communicative approach ignores language structure in favour of spontaneous language use in real acts of communication. Finally, a combined analytic-communicative approach reflects an intermediate level of language competence which is concerned with how knowledge of language structure is used to carry out various communicative tasks. Allen cautions against overlooking the value of any one of these approaches. Indeed, these are seen as complementary aspects of any practical language teaching programme and "the type of practice that is primarily in focus will vary from one programme to another" based on the teacher-learner variables that are involved (Allen, 1984: 71-73).

5. Materials. This is the final category and it examines materials with reference to their source: "pedagogic" (specifically designed for teaching purposes); "non-pedagogic" (originally intended for purposes other than those related to instruction); and "semi-pedagogic" (real-life materials modified for instructional purposes). A subcategory in the original **COLT** scheme referred to as "Text" analyzed written materials only, with respect to minimal or extended text - that is, the degree to which written materials exposed students to "Extended" (longer, cohesive, coherent) text as opposed to "Minimal" (isolated, disconnected, sentence length) text. For the purposes of this study, it was felt that all materials could be analyzed with respect to the "extended-minimal" distinction if one were to consider the type of exposure (extended or minimal) that these materials provided as well as whether such materials led to extended or minimal language use on the part of the students. This revised subcategory has been renamed "Discourse" and involves three levels:
   a. Material providing both exposure to extended text and opportunities for extended language use: **Extended discourse**.
   b. Material resulting in exposure to minimal text and opportunities for minimal language use: **Minimal discourse**.
   c. Material having one extended and one minimal feature - providing extended exposure and opportunities for minimal use or vice-versa: **Moderate discourse**.

Other Information

Age and sex. Information about sex and birthdate was available for all students in the sample.

Standardized test scores. Test results from the OBE City-Wide Testing programme were collected for all students in the sample. The Gates-MacGinitie English Reading Test is administered to all students in grades 3 (Level C), 6 (Level D), and 8 (Level E); each level includes scores for Vocabulary and Comprehension. Bilingual

mathematics tests developed by the board are used with grades 3, 5 and 7. The Canadian Cognitive Abilities Test is used at grade 4; this test was used board-wide for the first time in 1990.

Scores from previous research projects. For the MFI students in the sample, French reading and listening scores from grade 4 were available, as well as grade 6 scores on "Bienvenue au camp de la gélinotte" for the first cohort.

Tracing. Since the beginning of middle immersion, tracing information has been collected about all students in the programme.

BACKGROUND INFORMATION: TRACING AND ENROLMENT DATA

Background of Students Entering MFI

In earlier reports, some information has been provided about the background of students entering MFI. In Research Report 86-08 it was reported that the majority of students entering the first MFI cohort had been in a regular English programme at the primary level. Only four students had had prior experience in an immersion programme, while three had entered the programme directly from outside the OBE.

As reported in Research Paper 88-08, the 106 students entering the third MFI cohort had been in 25 different OBE schools in grade 3, nearly half of them in either an "alternative" school or one offering MFI. Fewer than 10 per cent had entered the programme from a school outside the OBE, while about 13 per cent had had some experience with an EFI programme in the OBE or elsewhere, ranging from part of a year in kindergarten to almost all schooling prior to grade 4.

Detailed information about previous schooling, obtained through parent and student questionnaires, is not available for the second, fourth or fifth cohorts. However, it appears that over 90 per cent of each cohort entered the programme directly from an English grade 3 in an OBE school. About 5 per cent have had some prior experience in an immersion or bilingual programme.

Two or three students have joined each MFI cohort after the beginning of grade 4. Half of these came from out of town or from another local board, while three have transferred from the OBE early immersion programme.

Attrition/Retention in MFI

Table D-1 in Appendix D shows the proportion of students who remain in each MFI cohort after one, two, three or four years in the programme, as well as the destination or programme of those who have left (based on the location of students at the beginning of

grades 5, 6, 7 or 8). It was noted that a particularly high proportion of students from the first cohort joined one of the other OBE immersion programmes (about 16 per cent of the original group) or left the board (about 26 per cent). The proportion remaining in the MFI programme seems to be a little higher for the second and third cohorts than for the first. Figures C-1 to C-4 show the actual pathways of students from the first four cohorts.

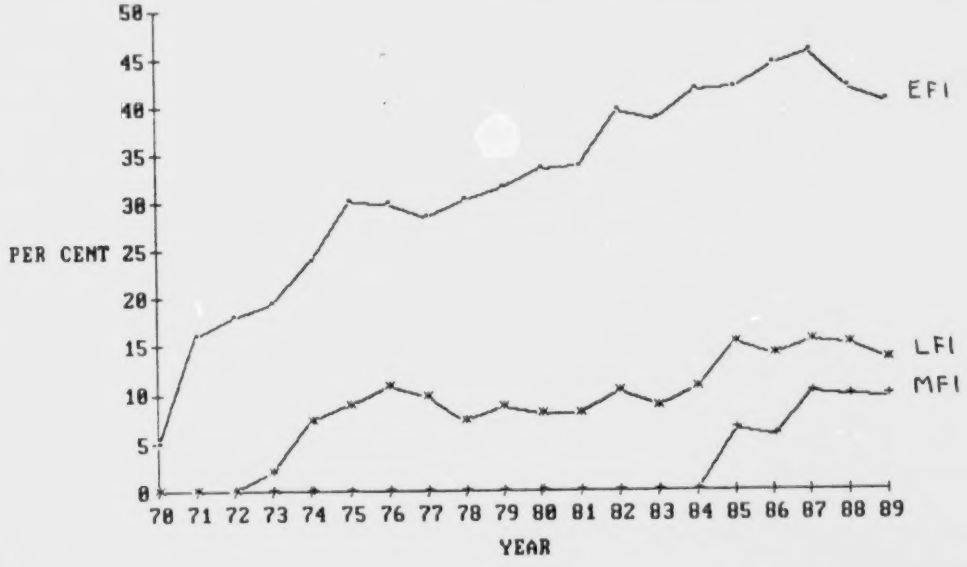
Enrolment Patterns in Immersion

For the 20 years from 1970 to 1989, the proportion of the population in OBE English-language schools who chose the EFI programme in kindergarten is shown in Table D-2 in Appendix D and illustrated in Figure 2. In this graph and table, the number of students starting MFI in grade 4 is shown as a percentage of students in English-language schools who were not in EFI at that grade level. Also shown is the corresponding proportion of grade 6 students not in EFI or MFI who entered LFI. These data extend the information on immersion enrolment in Research Paper 88-08.

It was noted in the earlier report that kindergarten enrolment in the early immersion stream did not generally appear to decline when it was known that other programmes would be available later on. As might be expected, the proportion of grade 6 students choosing LFI declined somewhat when the EFI cohorts reached this level. Over the past five years the percentages choosing EFI and LFI have remained relatively stable. Thus the establishment of the MFI programme does not appear to have significantly reduced the size of the EFI or LFI cohorts.

FIGURE 2

PROPORTION OF STUDENTS ENTERING IMMERSION, 1970 TO 1989



BACKGROUND INFORMATION: ACHIEVEMENT AND ABILITY OF OBE STUDENTS IN DIFFERENT PROGRAMMES

As background information about the types of students in various OBE programmes, scores on all tests given system-wide by City-Wide Testing over the past five years were examined. Mean scores are presented in Tables D-3 (Gates-MacGinitie English Reading Tests), D-4 (bilingual OBE Mathematics Tests) and D-5 (Canadian Cognitive Abilities Test) in Appendix D.

The following observations may be made regarding the information contained in these three tables:

Reading Tests: For both vocabulary and comprehension scores on the Gates-MacGinitie Reading Test given in grade 3, there is a small but consistent difference between means for the EFI and regular English programme groups, favouring the immersion students. At grades 6 and 8, there is a larger difference between means for the EFI and English groups. In most cases, students in EFI, MFI and LFI score similarly on the grade 6 and 8 reading tests. For each programme group, mean scores on the reading tests for the different years seldom differ by more than 2 points.

Mathematics Tests: The EFI means on the grade 3 and 5 bilingual mathematics tests are several points higher than those for the English group, with a somewhat greater difference on the grade 7 tests in most cases. Means for the MFI and LFI groups on the mathematics tests taken between grades 5 and 7 are generally similar to those for the EFI group. Means on most of the tests for the English programme group are fairly consistent from year to year, while immersion groups tend to show somewhat more variation.

Ability Test: On both the verbal and non-verbal scales of the Canadian Cognitive Abilities Test given in grade 4, EFI and MFI groups scored within a point of each other and more than 3 points higher than the English group.

In summary, then, it may be said that all immersion groups tend to perform at a somewhat higher level than groups in the regular English programme on these tests, and the difference tends to be greater at the higher grade levels. Consistent differences among the three types of immersion programme are not apparent.

BACKGROUND INFORMATION ABOUT THE SAMPLE GROUPS

Age and Sex of Sample Groups

Grade 6. Girls make up slightly more than half of the three immersion groups at the grade 6 level. The LFI group, on average, is a little younger than the MFI group, and the EFI group a little older. (See Tables D-6 and D-7 in Appendix D.)

Grade 8. At grade 8, girls make up nearly three quarters of the MFI group, while the proportion for EFI and LFI is about 55 per cent. The median age is similar for all three grade 8 groups. (See Tables D-6 and D-8.)

Achievement of Sample Groups in English Reading and in Mathematics

Grade 6. Table 3 shows mean scores on reading and mathematics tests for the sample groups in the three programmes at the grade 6 level. There do not appear to be major and consistent differences among the three groups.

TABLE 3

ENGLISH READING AND MATHEMATICS SCORES FOR GRADE 6 SAMPLE GROUPS: OTTAWA BOARD OF EDUCATION, 1990

Test and grade	EFI			MFI			LFI		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Grade 3:									
Gates-MacGinitie C:									
Vocabulary	37.1	5.4	44	38.7	5.4	69	38.2	4.8	37
Comprehension	34.8	6.0	45	36.5	5.0	69	34.3	5.7	36
OBE Math 3/4	43.8	7.9	46	45.7	5.6	70	47.6	4.5	36
Grade 5:									
OBE Math 5/6	32.9	6.4	43	31.7	5.4	79	33.4	6.5	45
Grade 6:									
Gates-MacGinitie D:									
Vocabulary	35.2	5.4	48	35.5	6.6	78	35.8	4.4	48
Comprehension	32.4	5.9	48	32.5	6.6	78	31.1	6.6	48

The grade 6 MFI group in the present study may also be compared to the corresponding groups in the two previous evaluations (the first two cohorts) (see Table D-9). Although differences are small, on almost all tests the mean for the 1990 group is a little higher than that of the 1989 group, which in turn is a little higher than that of the 1988 group. Thus it appears that the third MFI cohort is at least as strong academically as the first; that is, the first cohort is not a more select group than those following with respect to these variables.

Test scores for the grade 6 EFI comparison groups used in the three studies may also be examined (Table D-10). The 1988 and 1990

EFI groups were seen to have similar scores, while the 1989 group scored a little lower on all the tests. It was also noted that the 1989 grade 6 group was not as representative of the EFI population as a whole as were the other two EFI comparison groups.

Mean scores on the grade 6 reading test for the LFI sample group shown in Table 3 may also be compared to population means. It appears that the sample is representative of the whole group on this measure.

Grade 8. Mean scores on the reading and mathematics tests for the three grade 8 sample groups are shown in Table 4. It may be seen that mean scores for the MFI group are consistently but only slightly lower than those of the two other immersion groups. When results in Table 4 are compared with board-wide results, the EFI and LFI samples appear to be fairly typical of the grade 8 populations in these programmes.

TABLE 4

ENGLISH READING AND MATHEMATICS SCORES FOR GRADE 8 SAMPLE GROUPS: OTTAWA BOARD OF EDUCATION, 1990

Test and grade	EFI			MFI			LFI		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Grade 3:									
Gates-MacGinitie C:									
Vocabulary	37.8	5.2	50	36.9	6.4	31	36.3	6.2	32
Comprehension	35.5	5.7	50	34.0	5.3	31	35.9	5.1	32
Grade 5:									
OBE Math 4/5	31.4	5.9	54	29.6	5.8	32	30.9	5.7	44
Grade 6:									
Gates-MacGinitie D:									
Vocabulary	36.5	4.5	58	35.0	6.7	33	36.1	5.4	49
Comprehension	32.7	5.3	58	31.7	6.8	32	33.4	5.6	50
Grade 7:									
OBE Math 6/7	27.8	8.9	60	26.8	8.0	36	28.2	7.2	51
Grade 8:									
Gates-MacGinitie E:									
Vocabulary	32.6	6.5	62	31.2	7.1	36	32.1	5.5	53
Comprehension	32.0	7.0	62	31.9	7.5	36	32.0	5.2	53

RESULTS ON "BIENVENUE AU CAMP DE LA GÉLINOTTE"

Results for Grade 6 Samples

Comparison among programme groups. Table 5 shows mean scores on all scales of "Bienvenue au camp de la gélinotte" for the three grade 6 groups. It will be recalled that one segment of the test was completed by only two classes, so that scores on several scales are available for only a few students.

It may be seen that, in the written exercises, there were very slight differences among the groups in the number of errors made in the use of prepositions and in "Grammatical Spelling". (To obtain the latter score, the number of misspelled grammatical forms involving number, gender, or verb ending are marked, and the score is the number of these marked errors which would not sound correct if spoken.) The LFI, MFI and EFI groups, on average, used 9, 10 and 11 different verbs, respectively, in one of their compositions ("Variety of Vocabulary" scale); the difference between EFI and LFI groups is statistically significant. Each group averaged about one verb not on a list of common verbs ("Sophistication of Vocabulary" scale). The MFI and LFI groups were able to complete at least as many of the five specified "tasks" as the EFI group, and were somewhat better at maintaining a consistently objective style. However, both the MFI and LFI groups made more errors in tense sequence than the EFI group, with the LFI using the incorrect tense more often than the MFI group; the difference between EFI and LFI groups is significant.

Results on the oral subtests are limited, since only two classes did one of the speaking exercises. It may be seen that, for these small groups, EFI students did significantly better than LFI students on scales measuring pronunciation and fluency, and made somewhat fewer oral verb tense sequence errors. However, all groups scored similarly on the rating for "Communicative Strategies", the one oral test with results for all students.

On the cloze test, significant differences exist among all three groups. It appears that differences among the groups are hard to detect using the scales which focus on a narrow aspect of language proficiency and depend on a limited sample of written or spoken material. However, on an instrument like the cloze test which involves a broader range of skills and measures a more holistic concept of language acquisition, real differences in proficiency level are apparent between these groups, which have had very different amounts of instruction and experience in the second language.

TABLE 5

RESULTS ON SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE"
FOR GRADE 6 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Competence and subtest	Type of score	EFI group Mean	EFI group SD	EFI group N	MFI group Mean	MFI group SD	MFI group N	LFI group Mean	LFI group SD	LFI group N
Grammatical competence										
Use of prepositions	No. errors	2.5	1.5	45	2.5	1.5	69	2.7	1.3	44
Grammat. spelling	No. errors	2.4	1.4	45	2.8	2.1	69	2.7	1.6	43
Variety vocabulary#	No. verbs	11.1	3.0	43	9.9	3.1	72	9.3	3.5	44
Sophistication voc.	No. verbs	1.0	1.1	43	1.1	1.1	72	1.2	1.1	44
Pronunciation**	Rating 0-3	2.0	0.7	21	n.a	n.a	na	0.9	0.8	22
Discourse competence										
Task fulfilment	No. tasks	4.0	0.9	43	4.2	0.8	72	4.1	0.9	44
Written tense seq.##	% errors	18.1	15.8	43	23.4	17.5	73	30.1	19.5	44
Oral tense seq.	No. errors	1.0	1.1	21	n.a	n.a	na	3.2	2.8	22
Sociolinguistic competence										
Appropriate style*	Rating 0-1	0.4	0.5	45	0.6	0.5	69	0.5	0.5	44
Strategic competence										
Communicative str.	Rating 0-2	1.0	0.2	46	1.0	0.2	72	1.0	0.2	46
Cloze test###	Exact word	17.1	4.4	43	14.0	4.3	73	11.5	4.9	45
Fluency*	Rating 0-3	1.7	0.7	21	n.a	n.a	na	1.1	0.6	22

* Difference among groups was found to be significant, $p < 0.05$
** Difference among groups was found to be significant, $p < 0.01$
# EFI and LFI groups were found to be significantly different, $p < 0.05$
EFI and LFI groups were found to be significantly different, $p < 0.01$
All three groups differed significantly, $p < 0.001$

Table 6 shows the distribution of scores for the two subtests which involved a rating scale. It may be seen that, on the "Appropriateness of Style" rating, nearly two thirds of the EFI group did not maintain a consistent style, while nearly two thirds of the MFI group and over half of the LFI group were successful in this task.

The second part of Table 6 shows that the majority of students in all three groups received a rating of 1 for "Communicative Strategies", indicating that they used a strategy to get around a communication difficulty more often than they abandoned the attempt to get across what they wished to say. No student received a 0 rating (indicating that they usually abandoned their message), while a few in each group were given the highest rating because they had not experienced any difficulty which would have required a strategy to get around.

TABLE 6

DISTRIBUTION OF RATINGS ASSOCIATED WITH
"BIENVENUE AU CAMP DE LA GÉLINOTTE"
FOR GRADE 6 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Rating	Appropriateness of style: Number of students			Communicative strategies: Number of students		
	EFI	MFI	LFI	EFI	MFI	LFI
0	29	25	20	0	0	0
1	16	44	24	44	70	44
2	--	--	--	2	2	2

Although most students in all three programmes obtained the same rating for communicative strategies, some differences are apparent when the strategies used are categorized, as in Table 7. Overall, the two most frequently used strategies were using a less precise word and giving a literal translation. A higher proportion of LFI students used an English word, and both MFI and LFI students were more likely than EFI students to make a bad choice of word or to paraphrase. Using a less precise word was done more often by LFI students than by MFI students, but less often by EFI students. These differences are reflected in the second part of the table, which shows the average number of times each strategy was used.

TABLE 7

STRATEGIES USED TO GET AROUND COMMUNICATION DIFFICULTIES
BY GRADE 6 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

	Per cent of group using strategy			Ave. no. of times strategy used		
	EFI	MFI	LFI	EFI	MFI	LFI
Uses a less precise word	54	63	87	1.3	1.5	2.0
Gives literal translation	57	56	50	0.9	1.0	1.0
Uses English word	24	19	30	0.5	0.4	0.7
Paraphrases	17	26	26	0.2	0.4	0.4
Pronounces Eng. word as French	17	18	17	0.2	0.2	0.3
Makes a bad choice of word	9	19	13	0.1	0.2	0.1
Creates a new word	4	1	2	0.0	0.0	0.0
All strategies	96	97	96	3.2	3.7	4.4

ENGLISH WORD: Using an English word and giving it an English pronunciation

FRENCH PRONUNCIATION: Taking an English word and making it comprehensible by giving it a French pronunciation

CREATION OF A WORD: Creating a new but understandable word for a word they do not know by applying their knowledge of a related word in French

LITERAL TRANSLATION: Giving a literal translation of individual words in an expression for which they do not know the French equivalent

WRONG CHOICE OF WORD: Using a word that does not suit the context in which it is or using a word whose pronunciation resembles that of correct word (e.g. "rencontrer" for "raconter")

PARAPHRASE: Finding a paraphrase or another way of putting across what they want to say

LACK OF PRECISION: Using vague words such as "a person" or a thing"

Comparison with previous years. To determine whether results on "Bienvenue au camp de la gélinotte" were consistent over the past three years, mean scores on the various subtests were examined for all EFI and all MFI groups together (Tables D-11 and D-12, respectively). It should be noted that a different person scored the oral parts of the test in 1990 than did so in the two previous years, while the same scorer marked the written work throughout this period.

It appeared that the first three MFI cohorts performed similarly on most parts of this test. Only on the scales for variety and sophistication of vocabulary did the 1990 group score noticeably lower than the first group.

Results also indicate that the three EFI comparison groups scored similarly on most aspects of this test. However, the 1990 group tended to make more errors in verb tense sequence and to use fewer "sophisticated" verbs, while the 1989 group had a lower rating for appropriateness of style.

Comparison among schools. Mean scores by school for all subtests of "Bienvenue au camp de la gélinotte" are shown in Table D-13. Results on the grade 6 reading test are also included in this table to give an indication of the relative academic ability and achievement of the various classes.

On many subtests of "Bienvenue au camp de la gélinotte", there is more variation among classes within a programme than there is among the programme groups. In some cases the highest and lowest scoring classes are in the same programme. Only on the cloze test do both EFI classes score higher and both LFI classes score lower than all three MFI groups.

Results for Grade 8 Samples

Comparison among programme groups. Mean scores on the French proficiency subtests for the grade 8 groups in the three immersion programmes are shown in Table 8. The ratings for pronunciation and fluency and the score for oral tense sequence errors are not available for any grade 8 students.

It may be seen that the EFI grade 8 group scored higher than the LFI group on the cloze test and made fewer preposition and tense sequence errors. EFI students also did better than the MFI group on the cloze test.

On the other hand, the MFI group had a higher score for "Variety of Vocabulary" and made fewer tense sequence errors than the LFI group, and surpassed the EFI group on the "Appropriateness of Style" rating.

TABLE 8

RESULTS ON SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE"
FOR GRADE 8 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Competence and subtest	Type of score	EFI group Mean	EFI group SD	EFI group N	MFI group Mean	MFI group SD	MFI group N	LFI group Mean	LFI group SD	LFI group N
Grammatical competence										
Use of prepositions#	No. errors	1.6	1.3	60	2.1	1.4	34	2.4	1.4	50
Grammat. spelling	No. errors	2.1	1.5	60	2.1	1.8	34	2.4	1.4	48
Variety vocabulary##	No. verbs	11.9	3.4	59	13.9	3.9	32	10.6	4.3	49
Sophistication voc.	No. verbs	1.9	1.6	59	1.6	1.3	32	1.2	1.2	49
Discourse competence										
Task fulfilment	No. tasks	3.7	0.8	59	3.9	1.1	32	4.0	0.9	49
Written tense seq.###	% errors	9.7	9.6	59	15.4	16.0	32	25.8	16.6	49
Sociolinguistic competence										
Appropriate style***	Rating 0-1	0.4	0.5	60	0.8	0.4	34	0.6	0.5	49
Strategic competence										
Communicative str.	Rating 0-2	1.1	0.3	62	1.1	0.3	33	1.0	0.1	48
Cloze test####	Exact word	20.5	3.8	59	18.1	4.7	32	16.4	4.1	49

*** Difference among groups was found to be significant, $p < 0.001$
# EFI and LFI groups were found to be significantly different, $p < 0.01$
MFI and LFI groups were found to be significantly different, $p < 0.01$
LFI group differed significantly from EFI and MFI, $p < 0.001$
EFI group differed significantly from MFI and LFI, $p < 0.001$

Distributions of scores on the two rating scales of the test are shown in Table 9. It may be seen that a considerably higher proportion of MFI than of EFI or LFI students were rated 1 on the "Appropriateness of Style" scale, indicating that they had maintained a consistently impersonal style in their writing.

TABLE 9

DISTRIBUTION OF RATINGS ASSOCIATED WITH
"BIENVENUE AU CAMP DE LA GÉLINOTTE"
FOR GRADE 8 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Rating	Appropriateness of style: Number of students			Communicative strategies: Number of students		
	EFI	MFI	LFI	EFI	MFI	LFI
0	39	7	21	0	0	0
1	21	27	28	57	30	47
2	--	--	--	5	3	1

It may also be seen in Table 9 that most students in all three groups were rated 1 on communicative strategies. Table 10 shows the proportion of each group using each strategy and the average number of times each strategy was used. For all groups, giving a literal translation and using a less precise word were the two most commonly used strategies. The LFI group tended to make a bad choice of word or use an English word more often than the other groups. MFI students were more likely to give a French pronunciation to an English word or use a less precise word.

TABLE 10

STRATEGIES USED TO GET AROUND COMMUNICATION DIFFICULTIES
BY GRADE 8 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

	Per cent of group using strategy			Ave. no. of times strategy used		
	EFI	MFI	LFI	EFI	MFI	LFI
Gives literal translation	63	67	55	1.2	2.0	0.9
Uses a less precise word	52	67	49	1.1	1.6	1.2
Makes a bad choice of word	18	33	43	0.2	0.4	0.6
Pronounces Eng. word as French	21	33	22	0.3	0.6	0.4
Uses English word	24	6	35	0.7	0.1	0.9
Paraphrases	14	21	8	0.2	0.3	0.1
Creates a new word	8	6	6	0.1	0.1	0.1
All strategies	92	91	98	3.8	5.1	4.0

ENGLISH WORD: Using an English word and giving it an English pronunciation

FRENCH PRONUNCIATION: Taking an English word and making it comprehensible by giving it a French pronunciation

CREATION OF A WORD: Creating a new but understandable word for a word they do not know by applying their knowledge of a related word in French

LITERAL TRANSLATION: Giving a literal translation of individual words in an expression for which they do not know the French equivalent

WRONG CHOICE OF WORD: Using a word that does not suit the context in which it is or using a word whose pronunciation resembles that of correct word (e.g. "rencontrer" for "raconter")

PARAPHRASE: Finding a paraphrase or another way of putting across what they want to say

LACK OF PRECISION: Using vague words such as "a person" or a thing"

Comparison among schools. (See Table D-14.) The two EFI classes scored similarly on the subtests of "Bienvenue au camp de la gélinotte", except for the "Appropriateness of Style" rating. One MFI class performed slightly better than the other on the cloze test and on subtests measuring variety and sophistication of vocabulary. The vocabulary scales were also the measures where there was the most difference between the two LFI classes. For none of the three programmes does one class score consistently better than the other.

On the cloze test and for preposition and verb tense errors, both EFI classes performed better and both LFI classes more poorly than the two MFI classes. On the other scales, however, there tended to be as much variation between classes as between programmes.

Comparison of Grade 8 and Grade 6 Groups in the Same Programme

Early immersion. Results shown in Tables 5 and 8 for the two EFI groups tested in spring 1990 may also be compared. It was found that, compared to grade 6 in the same programme, the grade 8 EFI group made significantly fewer errors in prepositions and verb tenses, and scored higher on the cloze test and the "Sophistication of Vocabulary" scale. Other scores showed small differences in favour of the grade 8 group, except for the task fulfilment scale where the grade 6 group did slightly better.

Middle immersion. A comparison of results for the 1990 grade 6 and grade 8 MFI groups (Tables 5 and 8) indicate that the grade 8 group has a higher score on the cloze test and for variety of vocabulary, and they make fewer verb tense errors. As in the case of the EFI groups, differences favour grade 8, except on the task fulfilment scale.

Late immersion. For LFI groups at the two grade levels, as shown in Tables 5 and 8, all differences except the task fulfilment scale favour the grade 8 group. However, the difference is statistically significant only in the case of the cloze test. On comparing data for all six groups, it can be seen that almost all scores for the grade 8 LFI group are similar to those for grade 6 EFI.

Figures 3 to 5 show results on certain subtests for the three programme groups at both grade 6 and grade 8. These "box and whisker" plots show the group median as the central line of the box, corresponding to the score shown on the vertical axis. The 75th and 25th percentiles are represented by the top and bottom of the box, respectively.

FIGURE 3

RESULTS FOR EFI, MFI AND LFI GROUPS IN GRADE 6 AND GRADE 8 ON "VARIETY OF VOCABULARY" SCALE

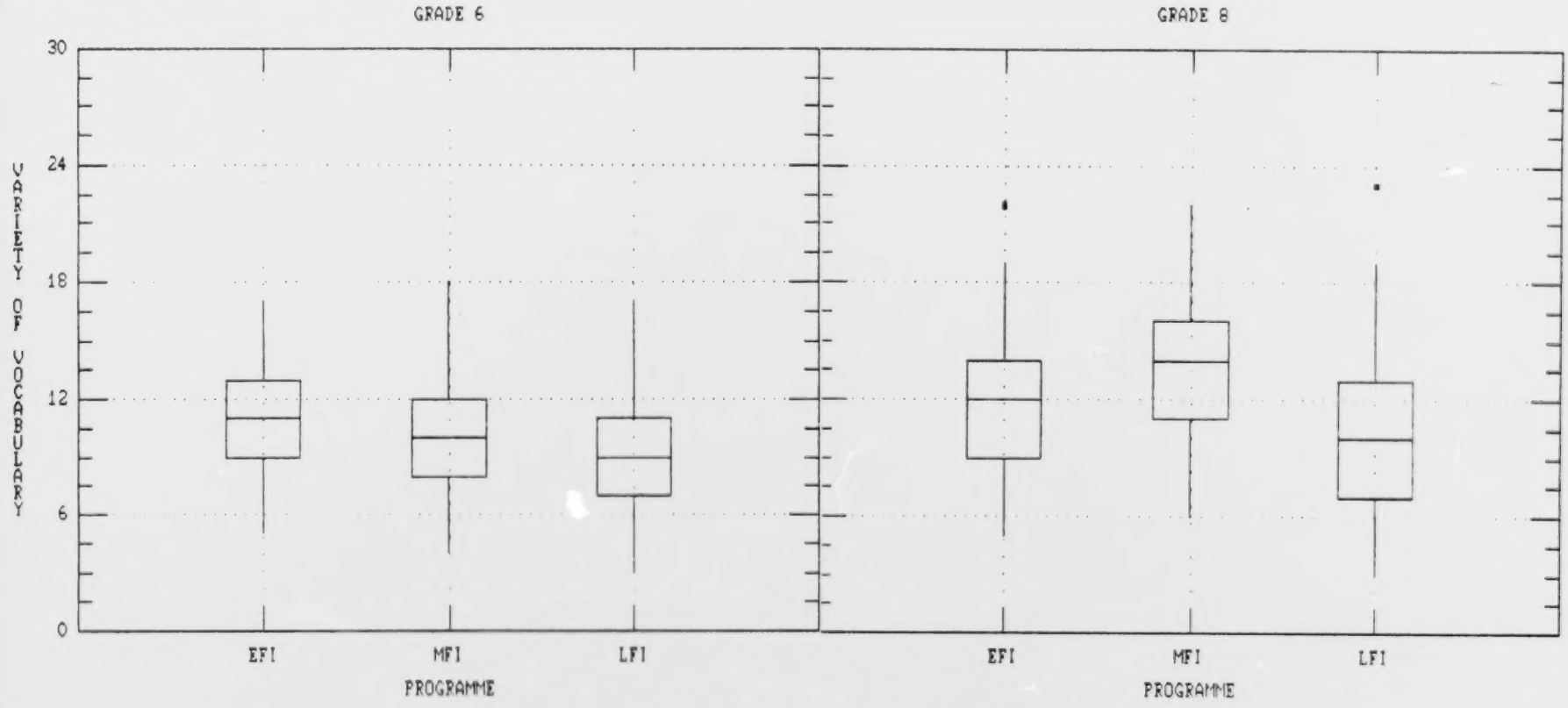


FIGURE 4

RESULTS FOR EFI, MFI AND LFI GROUPS IN GRADE 6 AND GRADE 8 ON "WRITTEN TENSE SEQUENCE ERRORS"

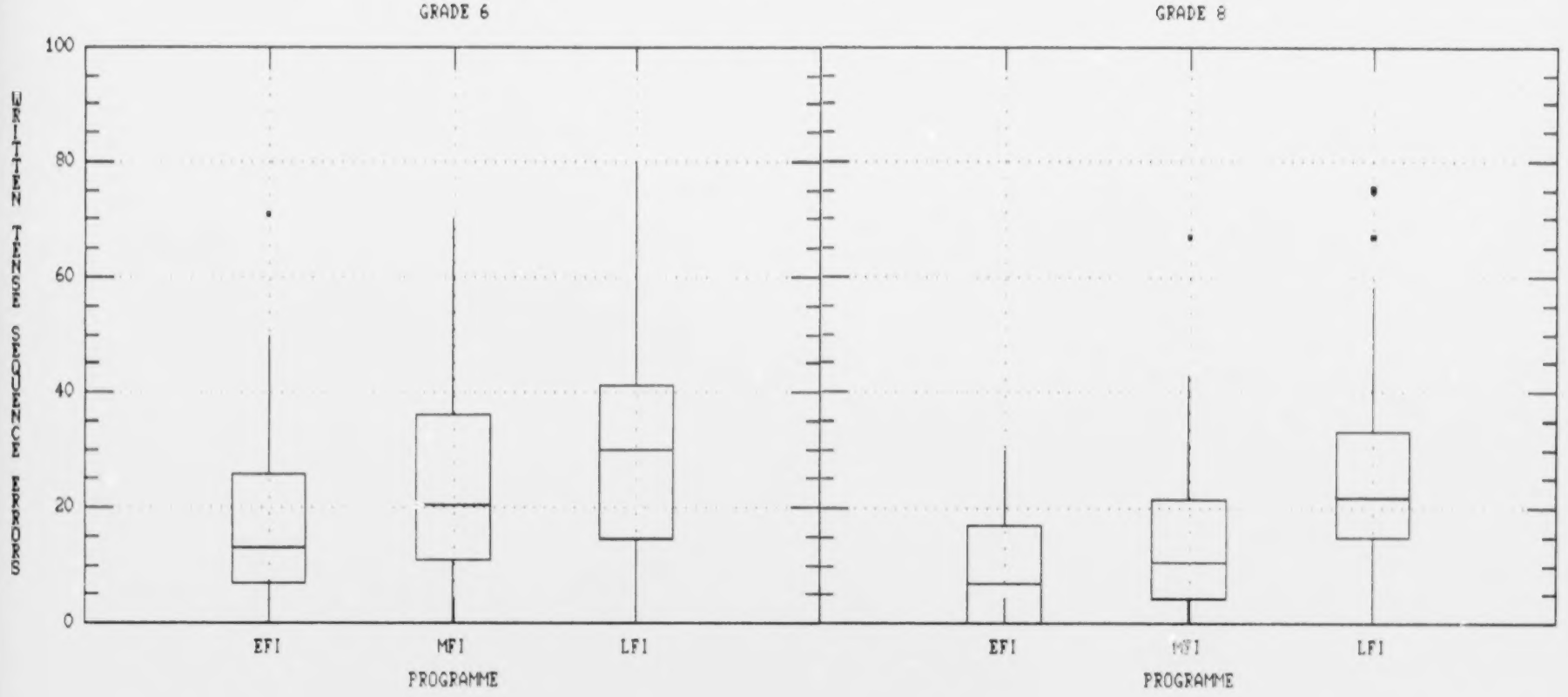
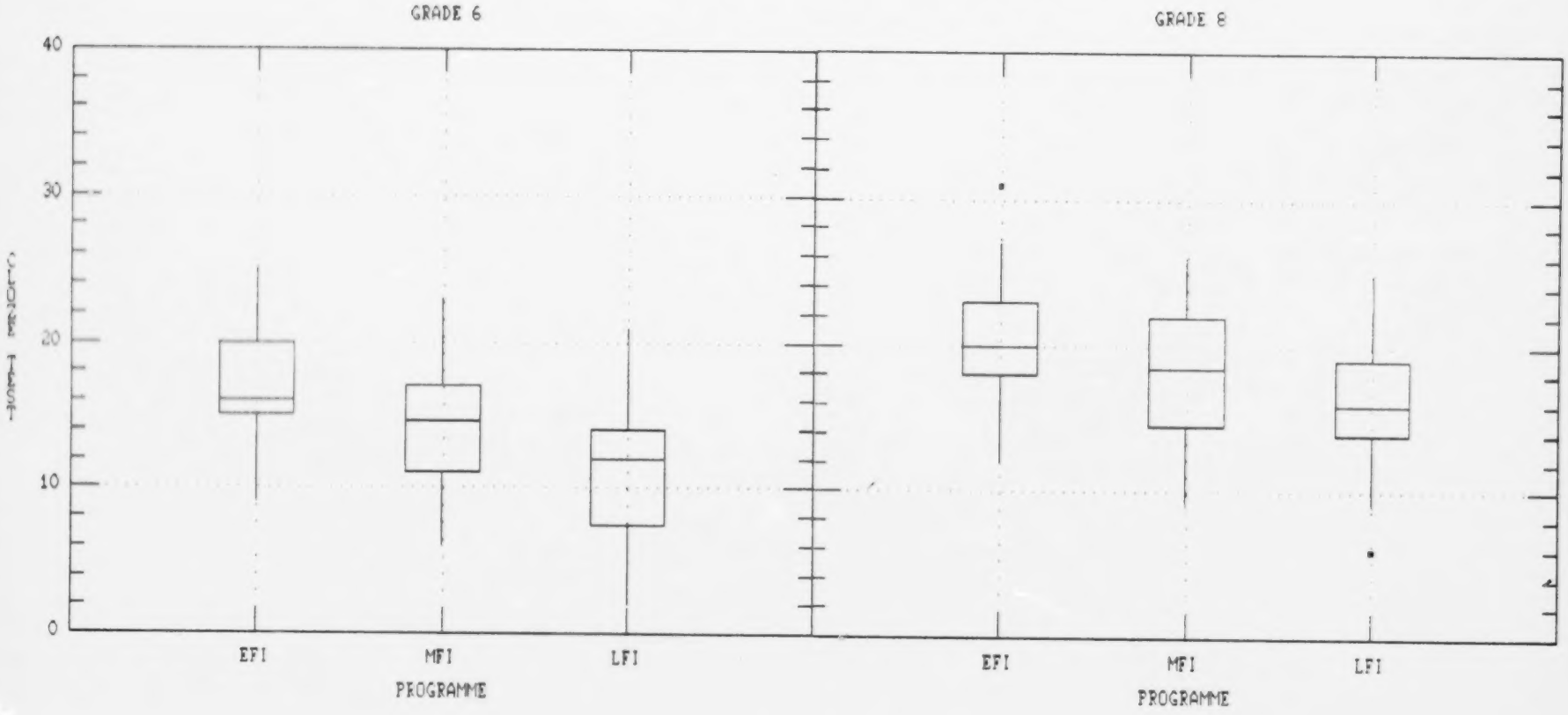


FIGURE 5

RESULTS FOR EFI, MFI AND LFI GROUPS IN GRADE 6 AND GRADE 8 ON CLOZE TEST



Comparison of Grade 6 and Grade 8 Scores for the Same Students

About half the students in the grade 8 EFI sample and most of the students in the grade 8 MFI group had also taken "Bienvenue au camp de la gélinotte" when they were in grade 6. Scores based on students who have taken the test twice are shown in Tables 11 and 12 for EFI and MFI groups, respectively. No grade 6 scores on this test are available for the grade 8 LFI sample.

This group of about 30 MFI students appears to have improved somewhat in most areas, except on the "Task fulfilment" subtest. Improvement is significant in the areas of "Variety of Vocabulary", tense sequence errors and the cloze test.

TABLE 11

RESULTS ON SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE" FOR MFI PUPILS TESTED IN GRADE 6 AND GRADE 8

Competence and subtest	Type of score	Grade 6 Mean	Grade 6 SD	Grade 6 N	Grade 8 Mean	Grade 8 SD	Grade 8 N
Grammatical competence							
Use of prepositions	No. errors	2.5	1.6	31	2.1	1.4	31
Grammat. spelling	No. errors	3.0	2.1	31	2.1	1.8	31
Variety vocabulary	No. verbs	11.8	3.2	29	14.3	3.8	29
Sophistication voc.	No. verbs	1.7	1.1	29	1.7	1.3	29
Discourse competence							
Task fulfilment	No. tasks	4.0	0.9	29	3.8	1.1	29
Written tense seq.	% errors	25.3	19.1	29	15.3	16.3	29
Sociolinguistic competence							
Appropriate style	Rating 0-1	0.6	0.5	31	0.8	0.4	31
Strategic competence							
Communicative str.	Rating 0-2	1.0	0.0	30	1.1	0.3	30
Cloze test	Exact word	13.8	5.0	29	18.3	4.7	29

Scores for the EFI group have improved in many areas (significantly so in the case of the cloze test) but results for "Appropriateness of Style" and "Grammatical Spelling" are significantly lower in grade 8. The MFI group appears to have made somewhat greater gains than the EFI group in the area of verb tense sequence and the skills measured by the cloze test.

TABLE 12

RESULTS ON SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE" FOR EFI PUPILS TESTED IN GRADE 6 AND GRADE 8

Competence and subtest	Type of score	Grade 6 Mean	Grade 6 SD	Grade 6 N	Grade 8 Mean	Grade 8 SD	Grade 8 N
Grammatical competence							
Use of prepositions	No. errors	2.0	1.5	27	1.5	1.1	27
Grammat. spelling	No. errors	1.7	1.2	28	2.5	1.5	28
Variety vocabulary	No. verbs	10.2	4.1	30	11.8	3.0	30
Sophistication voc.	No. verbs	1.5	1.3	30	2.0	1.7	30
Discourse competence							
Task fulfilment	No. tasks	4.0	1.0	30	3.9	0.8	30
Written tense seq.	% errors	9.3	17.5	29	9.4	9.7	29
Sociolinguistic competence							
Appropriate style	Rating 0-1	0.6	0.5	27	0.2	0.4	27
Strategic competence							
Communicative str.	Rating 0-2	1.0	0.0	30	1.1	0.3	30
Cloze test	Exact word	17.8	4.0	30	19.8	3.5	30

RESULTS ON VERB CLOZE TEST

It will be recalled that 35 verbs were removed from a passage of about 600 words; a score of 0 was given for use of an inappropriate tense, 1 if the tense was clearly intended to be the appropriate one but there was an error in the form, and 2 for a correct form in the appropriate tense. All six classes at grade 8 completed this test, but only two classes (one EFI and one LFI) at grade 6. Results on this test are presented in Table 13, showing means for the number of exact responses (out of 35), number of appropriate responses (out of 35), and total score (out of 70).

TABLE 13

RESULTS ON VERB CLOZE TEST
FOR EFI AND LFI STUDENTS IN GRADE 6
AND FOR EFI, MFI AND LFI STUDENTS IN GRADE 8

Grade	Pro-gramme	Exact		Appropriate		Total score		N
		Mean	SD	Mean	SD	Mean	SD	
Grade 6	EFI	6.7	4.2	16.2	4.6	22.9	8.3	22
	LFI	6.5	3.7	14.4	3.4	21.0	6.5	22
Grade 8	EFI	12.5	6.1	21.3	5.4	33.8	10.9	59
	MFI	12.0	5.9	20.4	4.9	32.4	10.3	33
	LFI	7.8*	4.6	17.3*	4.6	25.1*	8.6	48

* LFI group differed significantly from EFI and LFI, $p < 0.001$

It may be seen that there is relatively little difference between the two grade 6 groups, for either exact, appropriate or total score. However, at grade 8, the LFI group scored significantly lower than both other groups.

For the EFI programme, grade 8 means are significantly higher than grade 6 means for all three scoring methods. For LFI, the difference is significant only for "appropriate" scores. Based on these small grade 6 groups, it appears that EFI students have made greater gains than LFI students in verb usage between grade 6 and grade 8. It is regrettable that no date are available for grade 6 MFI students.

CLASSROOM OBSERVATIONS: SYNTHESIS OF FINDINGS AND DISCUSSION

The following is an analysis of the findings resulting from the classroom observations described earlier. An attempt will be made to determine if the descriptions of events at the classroom level reflect similarities or differences in the approach to instruction at the programme level, or if these findings are a result of variables that transcend programme boundaries. Also, results will be examined with respect to grade levels in order to ascertain if any similarities or differences may be attributable to grade or age-related factors. A detailed description of classroom activities and observations is given in a separate report (Dicks, 1990, in preparation); a summary of the activities is found in Appendix E.

The categories **COLT - Part A,** which were used as a basis for the descriptions of individual lessons, are analyzed in this section with reference to programme and grade-level trends. It was felt that an accurate picture of the various classroom orientations could be provided if this analysis considered whether lessons exhibited analytic (A), communicative (C), or a combination of analytic and communicative elements (A+C) for a specific category. The tables provided indicate the number of lessons in each programme that displayed either analytic, communicative, or combined elements.

Late French Immersion

Four classes in the LFI programme were visited on two separate occasions. The following synthesis is based on a total of eight classroom observations, four at grade 6 and four at grade 8.

Participant organization. Of the eight lessons observed, six were organized according to the "Whole Class" model and two were divided between the "Whole Class" and the "Group Work" model. With respect to grade levels, both grade 6 and grade 8 classes showed a preference for the "Whole Class" model.

Content/Topic. One of the eight lessons focused mainly upon meaning, three were concerned with a combination of meaning and language, and four of the lessons were involved with language in isolation. The topic in all eight lessons was selected and controlled by the teacher. There were no differences noted with respect to content across the two grade levels.

Material/Discourse. Six lessons used pedagogic materials and two used non-pedagogic materials. Three lessons used materials which prompted minimal discourse; and four others, moderate discourse. Only one of the lessons in the LFI programme involved extended discourse. These differences were reflected at both grade levels as well.

Student modality. Six of the eight lessons were primarily concerned with speaking and two others were evenly split between listening and speaking. Four lessons approached these skills in an analytic way, one in a communicative fashion, and three in a manner which combined both approaches. This analysis remains similar across grade levels with each grade having two analytic approaches.

Summary. **Table 14** below summarizes these results for Late French Immersion. The features listed in the first column are followed by either the letters (A), (C), or (A+C) to indicate analytic, communicative, or a combination of analytic and communicative characteristics.

TABLE 14

ANALYTIC AND COMMUNICATIVE FEATURES OBSERVED
IN OBE LATE FRENCH IMMERSION PROGRAMME, SPRING 1990

Aspects of lesson	No. lessons displaying analytic and communicative features		
	Grade 6	Grade 8	Programme
PARTICIPANT ORGANIZATION:			
Whole Class (A)	4	2	6
Group Work (C)	0	0	0
WC + GW (A+C)	0	2	2
CONTENT:			
Language (A)	2	2	4
Meaning (C)	1	0	1
M+L (A+C)	1	2	3
TOPIC:			
Teacher Controlled (A)	4	4	8
Student Controlled (C)	0	0	0
T+S (A+C)	0	0	0
MATERIALS:			
Pedagogic (A)	3	3	6
Non-Ped. (C)	1	1	2
Semi-Ped. (A+C)	0	0	0
DISCOURSE:			
Minimal (A)	1	2	3
Extended (C)	0	1	1
Moderate (A+C)	3	1	4
STUDENT MODALITY:			
Analytic (A)	2	2	4
Communicative (C)	1	0	1
Analytic-Comm. (A+C)	1	2	3
TOTAL:			
Analytic Features (A)	16	15	31
Communicative Features (C)	3	2	5
Analytic + Comm. Feat. (A+C)	5	7	12

The predominant organizational pattern for this programme was "Whole Class" as opposed to "Group Work". There was a near balance between purely language-focused content and content that was concerned to some degree with meaning. The topic was controlled in all cases by the teacher. The lessons were almost evenly split between minimal and moderate discourse - there was only one instance of "extended discourse". The majority of lessons used pedagogic materials. In terms of student modality, half the lessons were analytic, one was communicative, and three were combined analytic-communicative. These results were consistent at both the grade 6 and grade 8 levels.

With reference to the analytic and communicative orientation of the LFI programme, it can be seen from **Table 14** above that three of the six categories - "Participant Organization", "Topic Control" and "Materials" - lean quite heavily toward the analytic end of the instructional continuum. The remaining three categories - "Content", "Discourse", and "Student Modality" - have similar numbers of lessons displaying both analytic and combined analytic-communicative features, and only one lesson indicating purely a communicative feature.

Overall, considering all 48 characteristics (six features in each of eight lessons), 31 features (65 per cent) exhibit analytic characteristics, 12 (25 per cent) display combined analytic and communicative characteristics, and only 5 (10 per cent) have purely communicative characteristics. Thus the LFI programme is considered to be predominantly analytic in its classification. This appears to be the case for both grade 6 and grade 8 classes as no appreciable differences were found between these two levels with respect to all six categories.

Middle French Immersion

There were six classes visited in the MFI programme. Two separate observations of French language arts lessons were carried out in four these classes. In two other classes, observations were only possible for a single lesson. There are, therefore, a total of ten lessons which are discussed.

Participant organization. Of the ten lessons observed, seven were organized according to the "Whole Class" model, two according to the "Group Work" model, and one involved a combination of "Whole Class" and "Group Work". Five of the seven lessons observed at the grade 6 level were "Whole Class", one was "Group Work", and another a combination of both. Two of the three lessons at the grade 8 level were "Whole Class" and one was "Group Work".

Content/Topic. The content of these ten lessons was as follows: three classes focused upon meaning, five upon meaning and language, and two upon language in isolation. The topic was

controlled by the teacher in six lessons, by students in one lesson, and by the students and the teacher in three lessons. At the grade 6 level, two of the seven lessons focused upon meaning, four upon meaning and language, and one upon language alone. At grade 8, each of the three lessons focused upon a different content feature - one upon meaning, one upon meaning and language, and one upon language alone. The teacher controlled five of the seven lessons at grade 6 and one of three at grade 8. There do not appear to be any differences in these results with respect to either the grade 6 or grade 8 level.

Materials/Discourse. Five lessons used pedagogic material; four, non-pedagogic material; and one, semi-pedagogic material. Three lessons involved extended discourse; six, moderate discourse; and one, minimal discourse. These general patterns are also consistent at both the grade 6 and grade 8 levels. No marked differences appear that could be attributable to age or grade-related factors.

Student modality. Three lessons were primarily focused upon speaking, two others upon speaking and writing, three upon reading and speaking, one upon writing, and one upon listening, writing, and speaking. These skills were approached as follows: two lessons were analytic, three were communicative, and five were combined analytic-communicative. At grade 6 one lesson was analytic, two were communicative, and four were combined. At grade 8 each of the three lessons demonstrated a different approach - one was communicative; one, analytic; and the third, combined.

Summary. **Table 15** summarizes these results for the Middle Immersion programme and the two grade levels. The letters (A),(C), and (A+C) refer to analytic, communicative, and a combination of analytic and communicative features.

TABLE 15

ANALYTIC AND COMMUNICATIVE FEATURES OBSERVED
IN OBE MIDDLE FRENCH IMMERSION PROGRAMME, SPRING 1990

Aspects of lesson	No. lessons displaying analytic and communicative features		
	Grade 6	Grade 8	Programme
PARTICIPANT ORGANIZATION:			
Whole Class (A)	5	2	7
Group Work (C)	1	1	2
WC + GW (A+C)	1	0	1
CONTENT:			
Language (A)	1	1	2
Meaning (C)	2	1	3
M + L (A+C)	4	1	5
TOPIC:			
Teacher Controlled (A)	5	1	6
Student Controlled (C)	0	1	1
T + S (A+C)	2	1	3
MATERIALS:			
Pedagogic (A)	4	1	5
Non-Ped. (C)	3	1	4
Semi-Ped. (A+C)	0	1	1
DISCOURSE:			
Minimal (A)	0	1	1
Extended (C)	1	2	3
Moderate (A+C)	6	0	6
STUDENT MODALITY:			
Analytic (A)	1	1	2
Communicative (C)	2	1	3
Analytic-Comm. (A+C)	4	1	5
TOTAL:			
Analytic Features (A)	16	7	23
Communicative Features (C)	9	7	16
Analytic + Comm. Feat. (A+C)	17	4	21

The large majority of lessons in the MFI programme were organized according to the "Whole Class" model. With respect to content, the large majority of lessons focused on meaning or meaning and language. About half the lessons used pedagogic materials. Discourse was largely moderate with some extended cases, but only one instance of minimal discourse. In the "Student Modality" category, half the lessons displayed an analytic approach, and the others were divided between communicative and combined approaches. The topic tended to be controlled by the teacher in the majority of lessons, by teachers and students in some, and by students alone in only one lesson. In comparisons between grade levels, grade 8 classes tended to demonstrate more balance between the three features than the grade 6 classes.

With respect to the analytic and communicative orientation of the MFI programme, it can be seen from **Table 15** above that two of the six categories - "Participant Organization" and "Topic Control" - lean toward the analytic end of the instructional continuum. "Content" tends to be more communicative in its orientation. The remaining three categories show a tendency to be more evenly divided with respect to the number of lessons that exhibit predominantly analytic and communicative features. Overall, 23 features (38 per cent) exhibit analytic characteristics, 16 (27 per cent) communicative characteristics, and 21 (35 per cent) combined analytic and communicative elements. This represents a more eclectic approach with respect to analytic, communicative, and combined communicative-analytic features than is the case in LFI. This appears to be true for both grade 6 and grade 8 classes as no appreciable differences were found between these two levels with respect to all six categories.

Early French Immersion

French language arts lessons were observed in the EFI programme on two separate occasions in three classes and once in a fourth class for a total of seven observations - three at the grade 6 and four at the grade 8 level.

Participant organization. Five of the seven lessons were organized according to the "Whole Class" model. Of the two remaining lessons, one was characterized by "Group Work", and another by combined "Whole Class" and "Group Work" interaction. In grade 6 the format was entirely "Whole Class", while in grade 8 half the lessons were of the "Whole Class" type, one involved "Group Work", and another a combination of the two.

Content/Topic. One of the seven lessons focused upon meaning, six upon meaning and language, and **none** upon language in isolation. Students and teachers evenly shared control of the topic. There were no major grade level differences noted with respect to the content category, but students tended to control the topic more often in grade 8 classes.

Materials/Discourse. Materials in five lessons were non-pedagogic and one was pedagogic. Materials in all lessons but one provided exposure to extended discourse and resulted in opportunities for extended discourse.

Student modality. Speaking was the main focus of four of the lessons, speaking and writing the focus of two others, listening and writing the focus of another, and all four skills were the focus of a final lesson. Concerning the approaches to these skills in the seven different lessons, one was communicative, six were combined analytic-communicative, and **none** was purely analytic. There were no grade level differences noted in this respect.

Summary. The findings for the Early French Immersion programme and the two grade levels are summarized in Table 16. The letters (A), (C), and (A+C) refer to analytic, communicative, or combined analytic and communicative characteristics, respectively.

TABLE 16

ANALYTIC AND COMMUNICATIVE FEATURES OBSERVED
IN OBE EARLY FRENCH IMMERSION PROGRAMME, SPRING 1990

Aspects of lesson	No. lessons displaying analytic and communicative features		
	Grade 6	Grade 8	Programme
PARTICIPANT ORGANIZATION:			
Whole Class (A)	3	2	5
Group Work (C)	0	1	1
WC + GW (A+C)	0	1	1
CONTENT:			
Language (A)	0	0	0
Meaning (C)	0	1	1
M + L (A+C)	3	3	6
TOPIC:			
Teacher Controlled (A)	2	1	3
Student Controlled (C)	0	3	3
S + T Controlled (A+C)	1	0	1
MATERIALS:			
Pedagogic (A)	1	0	1
Non-Ped. (C)	2	3	5
Semi-Ped. (A+C)	0	0	0
DISCOURSE:			
Minimal (A)	0	0	0
Extended (C)	2	4	6
Moderate (A+C)	1	0	1
STUDENT MODALITY:			
Analytic (A)	0	0	0
Communicative (C)	0	1	1
Analytic-Comm. (A+C)	3	3	6
TOTAL:			
Analytic Features (A)	6	3	9
Communicative Features (C)	4	13	17
Analytic + Comm. Feat. (A+C)	8	7	15

The class organization for the EFI programme was largely in terms of a "Whole Class" format. With respect to "Content", all lessons but one focused upon meaning and language. The topic was controlled equally by students and by the teacher. All materials were non-pedagogic, and all but one involved extended discourse. **None** of the lessons was analytic in its approach. With the exception of the "Topic Control" category, which indicated more control for grade 8 than for grade 6 students, there were no appreciable differences noted between grade level descriptions.

With reference to the communicative and analytic orientation of the EFI programme, it is clear from **Table 16** that lessons in this programme display many more purely communicative characteristics than strictly analytic features. The "Materials" category is entirely communicative, and both the "Discourse" and "Content" categories reveal **no** lessons which display any purely analytic features. There is only one category - "Participant Organization" - which contains a majority of lessons that are classified as analytic. Overall, 9 features (22 per cent) display analytic characteristics, 17 (41 per cent) exhibit communicative characteristics, and 15 (37 per cent) reveal combined analytic and communicative elements. All these analyses, with the exception of "Topic Control", apply to both the grade 6 and grade 8 lessons.

Comparison among the Three Immersion Programmes

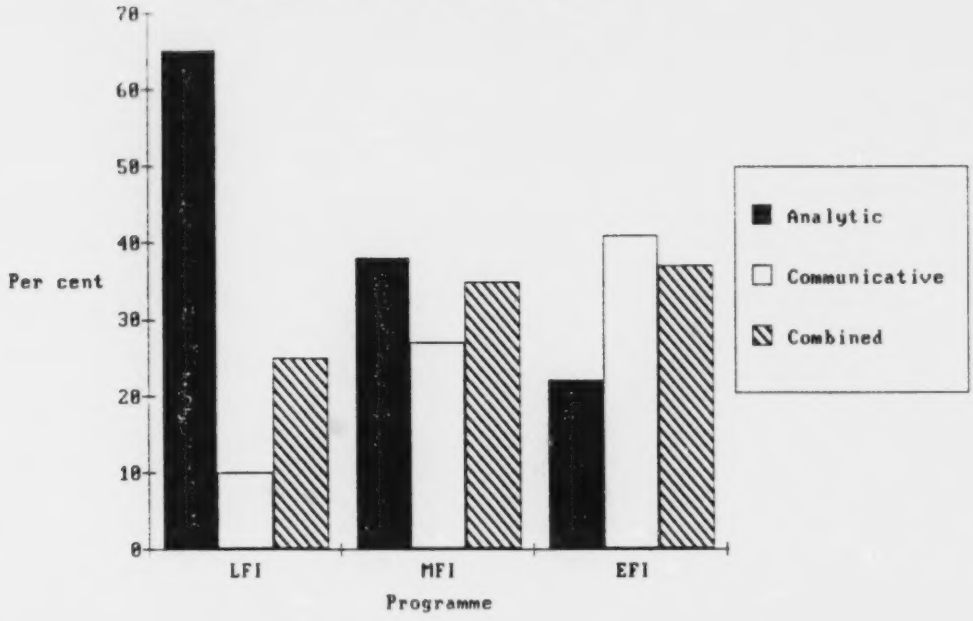
The findings of this study suggest that differences in the orientation of French language arts classes in French Immersion may be related to the programme in which those classes are found. The LFI programme contains a majority of analytic features and very few communicative characteristics. The EFI programme is characterized by a majority of communicative elements, while purely analytic features account for the smallest group. In the MFI programme there is a fairly strong analytic orientation, but a more even distribution of lessons displaying analytic and communicative features than in the other two programmes.

There is a tendency for the percentage of combined communicative and analytic features to be greater in earlier starting programmes: 25 per cent in LFI, 35 per cent in MFI, and 37 per cent in EFI.

Figure 6 displays the percentage of lessons which were characterized by analytic, communicative, and combined analytic and communicative features in each of the three programmes.

FIGURE 6

PERCENTAGE OF LESSONS DISPLAYING ANALYTIC, COMMUNICATIVE AND COMBINED FEATURES



RELATIONSHIPS AMONG SCORES AND BETWEEN SCORES AND OBSERVATIONS

Correlations among Scores

Grade 6. Correlations were computed between the cloze test which was part of "Bienvenue au camp de la gélinotte" and a variety of other measures: other scores from this evaluation kit, standardized test results, and earlier measures of French reading and listening (see Table D-15). It was noted that correlations among various parts of "Bienvenue au camp de la gélinotte" are generally low, especially for the EFI and MFI groups. As expected, correlations with "Preposition Errors", "Grammatical Spelling Errors" and "verb Tense Sequence Errors" are negative, since for these subtests a higher score indicates poorer performance. It appears that results on the cloze test, an overall measure of French proficiency, are generally more closely related to scores on the English reading tests than to other measures included in this analysis.

Grade 8. Generally similar results were also found at grade 8: correlations of the cloze test with other subtests of "Bienvenue au camp de la gélinotte" are seldom significant, while most with English reading test scores are (Table D-16). Correlations of grade 8 cloze test scores with results on the same measure from grade 6 were also found to be significant: 0.58 for EFI students and 0.75 for MFI students.

Relationship between Classroom Observations and Test Results

Grammatical Competence. **Grade 6:** There were few significant differences found among any of the three programmes with respect to all aspects of written grammatical competence at the grade 6 level. Since grammatical competence may be considered to be directly related to the "analytic" category, the lack of difference may in part be explained by the findings resulting from observations of the three programmes.

In LFI and MFI at the grade 6 level, the majority of features tend to be purely analytic. In the EFI programme, strictly analytic characteristics only account for one-third of all observed features. It may be the case that the larger emphasis on these aspects in the LFI and MFI programmes at this grade level may result in a level of grammatical competence that is close to that of the Early Immersion students.

Grade 8: At the grade 8 level, the test results for grammatical competence are more varied. The EFI programme performed significantly better than the LFI programme with respect to the "Use of Prepositions", and the MFI programme better than LFI with respect to "Variety of Vocabulary". The results for "Grammatical Spelling" are comparable across all three programmes.

At grade 8, the LFI programme was predominantly analytic. In the MFI programme, less than half the features were analytic, and the EFI programme had very few purely analytic features. The largely analytic component of the LFI and MFI programmes does not seem to have had a consistent effect on grammatical competence at the grade 8 level. However, the strong performance of both Middle and Late immersion students on the "grammatical spelling" test may reflect the analytic approach to some degree.

Discourse Competence. **Grade 6:** The "Written Tense Sequence" test was administered to grade 6 students in order to test discourse competence. The grade 6 EFI group performed somewhat better than the MFI and LFI groups on this subtest. The MFI group also performed better than the LFI programme students.

Given the much larger degree of exposure to French that both EFI and MFI students receive in comparison to their peers in LFI at this grade level, this result is as expected. Discourse competence is considered to reflect the ability to use language appropriately in situations requiring longer discourse. Grade 6 LFI students would be at a disadvantage in this regard due to the small degree of exposure to French. Emphasis on purely analytic aspects of language would not be able to compensate for this.

In addition to the "Written Tense Sequence" test, a "Verb Cloze Test" was administered to students in grade 6 in EFI and LFI. Students were required to put verbs in a longer passage in the appropriate tense and to write these verbs correctly. On average, EFI students were able to provide 16 appropriate tenses, and LFI students, 14. Appropriate verbs that were also accurately produced totalled less than 7 for both EFI and LFI students.

Given the large discrepancy in the amount of exposure to French between the two groups, LFI students were not expected to perform nearly as well as their EFI peers on the verb appropriacy task. The fact that both groups had great difficulty with accuracy of verb form may suggest that neither a strictly analytic focus found in LFI, nor a more communicative approach prevalent in EFI, is conducive to accurate verb tense usage in longer discourse.

Grade 8: At grade 8, the "Written Tense Sequence" test was administered to all students. The results on this test were similar to those at grade 6. The EFI programme performed significantly better than the LFI programme, and the MFI programme performed better than students in LFI.

As in grade 6, the degree of exposure to French is related to the relative fluency of the students in the various programmes. It is not surprising that the greater analytic focus in LFI has little effect on discourse competence. The tendency to focus on language form in a communicative context in MFI and EFI at grade 8 may in part explain the superior performance of these students.

In addition to the "Written Tense Sequence" test, the "Verb Cloze Test" referred to above was administered to grade 8 students in Early, Middle, and Late Immersion. There were significant differences noted with respect to the EFI and MFI students' ability to provide both the appropriate tense and the exact answer as opposed to LFI students' ability to do both these tasks.

These results tend to support the argument concerning language form and context discussed above. In LFI where the emphasis at the grade 8 level tends to remain more analytic, discourse competence is not as greatly developed. It should be noted, however, that the total number of hours of exposure, which are a function of starting age in these three programmes, tends to be linked to the type of approach taken in different contexts.

Conclusions. The grammatical competence of students in French Immersion programmes seems to be largely similar at both grade 6 and grade 8 levels. It may be that the "analytic" approaches which are in evidence in LFI and the combined "analytic-communicative" approaches of MFI serve to develop grammatical skills to a level that is comparable to students in EFI.

The discourse competence in these programmes tends to be more strongly developed in EFI than in MFI, and greater in MFI than in LFI. The fact that discourse competence reflects the accurate use of language in meaningful contexts may explain these findings. The total number of hours of exposure to French provides greater opportunities for extended discourse and focus on language form in meaningful contexts. It is much harder to compensate for fluency and general proficiency in LFI and MFI than it is to compensate for grammatical weaknesses. However, to the degree that it is possible, it would seem that an approach which integrates grammatical activities in a communicative context may assist the development of discourse competence at all levels.

SUMMARY AND DISCUSSION

Summary of Results

In the course of this study in the spring of 1990, the three OBE French immersion programmes were examined at the grade 6 and grade 8 levels. The investigation included both classroom observations and the administration of several measures of French production. The entire population of the Middle Immersion (MFI) programme was involved, while two grade 6 and two grade 8 classes in each of the Early Immersion (EFI) and Late Immersion (LFI) programmes were selected as comparisons.

A preliminary investigation of background information indicated that the grade 8 sample groups in the three programmes were quite similar in terms of such variables as age and scores on a test of English reading. Moreover, the EFI and LFI samples appeared to be fairly typical of the board population in these programmes. Findings were similar for the grade 6 groups.

Eight subscores were obtained for different specific aspects of oral and written French production. At grade 8, the EFI group was found to make fewer errors in prepositions and in written verb tense sequence than the LFI group. The three groups had similar scores for "Grammatical Spelling", "Task Fulfilment" (the number of required pieces of information included in a composition), and "Communicative Strategies". The MFI group did better than the LFI group on scores for "Variety of Vocabulary" (number of different verbs used) and "Written Tense Sequence Errors". There were also differences among groups on the "Appropriateness of Style" rating (ability to maintain a consistently impersonal style in writing a paragraph), with the MFI group performing best and the EFI group least well.

The instrument used also includes a Cloze Test, to measure language acquisition in a more holistic way. On this test the EFI group scored higher than both the MFI group and the LFI group.

At the grade 6 level, the most noticeable difference among the three groups was on the Cloze Test. The EFI group made fewer errors in written verb tense sequence then the LFI group and used a wider variety of verbs. Most scores for the grade 6 MFI group were similar to those for the first and second cohorts tested in the previous two years. Mean scores for the grade 6 EFI group were similar to those of the grade 8 LFI groups on almost all subtests.

A comparison of results for grade 6 and grade 8 indicated that, within each programme, most of the means for grade 8 were somewhat higher than those for grade 6. The difference was particularly noticeable in the case of the Cloze Test. Groups of EFI and MFI students who had taken the test when they were in grade 6 as well as during the present study made gains in most areas

except "Task Fulfilment" and "Appropriateness of Style". The MFI group showed greater improvement than the EFI students in the use of verb tenses and on the cloze test.

In scoring for the "Communicative Strategies" rating, a count was made of the number of times students used several different types of strategy in trying to get around a difficulty in oral communication. The most commonly used strategies for all groups were giving a literal translation of a phrase and using a vague or imprecise word (such as "a person" or "a thing").

When results on the subtests measuring a specific aspect of French production were compared class by class, it was noted that there tended to be more variation among classes in a given programme than between programmes. On the cloze test, however, both grade 8 EFI classes scored higher than both grade 8 MFI classes who in turn scored higher than both grade 8 LFI classes. The same was true at grade 6.

Classroom observations were recorded using an instrument designed to indicate whether several aspects of a lesson exhibited a "communicative" or an "analytic" orientation. Overall, it was found that characteristics in EFI classes tended towards the "communicative" end of the scale and those in LFI classes tended towards the "analytic" end. MFI classes tended to have a more eclectic profile, with many features having combined communicative and analytic characteristics. This observation was true at both grade 6 and grade 8.

An examination of enrolment in the OBE's three immersion programmes indicated that the introduction of MFI does not seem to have affected the proportion of students choosing the LFI option. Enrolment in EFI as a percentage of kindergarten enrolment is down slightly in the past two years, but it is not possible to say whether this is a trend or part of expected variation. The size of the groups entering MFI does not seem to be increasing greatly. Data continue to be collected about the background of students entering MFI and the destinations of those who leave. Although there is a small amount of mixing among the three immersion programmes at the elementary level, only a few students joining the MFI programme have had experience in EFI.

An analysis of mean scores on standardized tests over the past five years indicated that immersion groups on the whole performed better than students in the regular English programme in English reading (grades 3, 6 and 8) and mathematics (grades 3, 5 and 7). Students in the three types of immersion had similar means in most cases.

Discussion of Test Results

The finding that the proficiency of MFI students tends to be between that of the EFI and the LFI groups is not particularly surprising in light of the relative numbers of hours of instruction in French. This would seem to represent a satisfactory level of achievement for this programme group. It is also reassuring to know that at least some of the skills measured were found to increase between grade 6 and grade 8.

If high school French courses exist which are appropriate for EFI and LFI students, it seems likely that students entering high school from the MFI programme should be able to find courses suitable for their level of French, which seems to be between those of the other two. The question of when and how to merge students from any or all of the immersion options includes many dimensions beyond French proficiency - for instance, consideration needs to be given also to questions of programme location, transportation, numbers of students, and so on.

Most subscores of the main French proficiency instrument used in this study measure narrow aspects of French production and seem to vary as much between classes in the same programme as they do among programme groups. The cloze test, on the other hand, measures language proficiency in a more holistic way. Differences among groups in scores on this test seem to reflect genuine programme differences, which would be expected from the differing amounts of French instruction.

It will be remembered that, during grade 6, the LFI group has had totally French instruction, the MFI group about 80 per cent of the time in French, and EFI students about half in each language. The greater intensity of French language instruction in the grade 6 year for the LFI students (and to some extent MFI also) may help to explain the relatively few differences found between these groups and EFI students at the end of grade 6. During grade 8, the three programme groups have all been exposed to the same proportion of French instruction, so that other factors such as total cumulative hours of French may have a greater effect on results than intensity of French in the past year.

Discussion of Classroom Observations

The classroom observation findings may be explained in light of programme differences that are related to the starting ages of the students and the amount of time students have spent in the various programmes. Students begin the EFI programme at a very young age when they are not expected to focus upon language in an analytic or formal way. Consequently, more communicative language skills tend to be developed in the early years of this programme. It is not altogether surprising that, after 4680 cumulative hours of instruction in French by grade 6 and 5580 hours by grade 8,

teachers capitalize upon this fluency and engage students in more "message-oriented" activities. LFI students, on the other hand, only begin their programme at grade 6 and have not had five or more years to develop strong fluency skills before engaging in more analytic activities. These students have a total of 1590 cumulative hours of French instruction by grade 6 and 2490 hours by grade 8 - considerably less than their peers in the early entry programme. Also, when they enter the LFI programme, these students could be expected to possess a higher degree of intellectual maturity and superior first language literacy skills compared to students entering EFI in kindergarten or grade 1. The classroom teacher in LFI seems to recognize these factors and employs pedagogical activities which reflect a more analytic approach. MFI, which begins at a point between EFI and LFI (the cumulative hours of French instruction total 2610 by grade 6 and 3510 by grade 8), appears to contain certain elements of both the other programmes. Students in MFI possess a greater degree of second-language fluency than their peers in LFI, but are less fluent than students at the same grade level in EFI. MFI students have also developed literacy skills in their first language before beginning French, but not as completely as students in LFI. The findings seem to suggest that teachers in the MFI programme utilize students' moderate fluency and their analytical abilities in an orientation that draws somewhat equally from communicative and analytic approaches.

It is interesting to note that the percentage of combined analytic and communicative features increases steadily from LFI (25 per cent) to MFI (35 per cent), to EFI (37 per cent). This may reflect the superior fluency of students in the earlier starting programmes.

With respect to the grade level analyses, no appreciable differences were noted in the approaches taken at the grade 6 and grade 8 levels in either the Late or Early immersion programmes. The similarities in classroom orientation at both grade 6 and grade 8 may be due to the fact that these grades are not very far apart. Future research on grade level differences might benefit from an examination of the orientation of grade 4 classes, for example, as compared to classes at the grade 8 level.

This report attempts to provide some insight into the approaches taken to the teaching of French in classrooms in three different French Immersion programmes. The findings discussed here are based on a limited number of classroom observations, and should not be taken as definitive statements which are generalizable to all lessons in these or in other classrooms. It is hoped, nonetheless, that these characterizations may be used to complement results from testing and other sources so as to provide a better understanding of the complexities of the second language teaching process and its outcomes in different contexts.

Limitations and Cautions

It should be remembered, first, that the grade 8 MFI group studied in the course of this project is the first cohort to enter this programme and is relatively small. Although no evidence was found that the grade 6 group studied here (the third cohort) was very different from the first, it might be useful to continue to collect data about the performance of later cohorts in this programme.

Like any test or observation instrument, the tests used in the project involve only a sample of all possible questions or situations. Differences cited in this report should always be considered in the context of this particular instrument. In addition, several of the scales in the French production test used here involve a certain amount of judgment and interpretation so that questions of reliability cannot entirely be eliminated.

Some of the subtests consist of ratings with only two or three possible values. Others involve a focus on one limited aspect of the work produced - for instance, the appropriateness of style score - and cannot be said to reflect overall effectiveness or any other feature of the composition. The same may be said of a score like "Grammatical Spelling", where words such as articles cannot be marked wrong if they have been omitted incorrectly. In spite of limitations of a test instrument such as the one used in this study, a wealth of information has been collected and the possibility exists for further analysis of students' work in order to investigate aspects of particular interest to the classroom teacher.

Because of the OBE Elementary Teachers' 26-day strike during the time of this study, it was not possible to collect as much data as anticipated. Only limited information is available about oral production and scores on the Verb Cloze Test are missing for most grade 6 students. It was not possible to collect information from grade 8 students about their plans for high school programmes and their assessment of their present proficiency in French.

It appears that the EFI and LFI programmes can be characterized as generally oriented towards the "communicative" and "analytic" ends of the continuum, respectively, with MFI in the middle. Similarly, with respect to the acquisition of French, students in EFI and LFI tend to be more and less proficient, respectively, than the MFI group. It is not to be concluded from these observations that "communicative" teaching per se leads to increased proficiency. Rather, it is likely that both teaching orientation and French achievement are linked to starting age and hence to the time spent in French instruction.

Conclusions

1. The finding that the French proficiency of MFI students tends to be between that of EFI and LFI students is not particularly surprising. Moreover, it indicates that the current policy of enrolment of students in grade 9 French language programmes is appropriate.

2. Within each immersion programme, the French language achievement of grade 8 students is generally superior to that of grade 6.

3. Additional research examining the use of verb tenses needs to be conducted with particular emphasis on grades 6 and 8 MFI.

4. The classroom observation findings concerning language-related activities in grades 6 and 8 appear to be consistent with what might be expected for students who started immersion in kindergarten, grade 4 and grade 6 and who consequently have had widely differing amounts of French instruction. The three immersion programmes appear to differ in pedagogic orientation as well as in students' language proficiency.

5. The introduction of the MFI programme does not appear to have substantially reduced the proportion of students choosing either the early or late immersion options.

APPENDIX A

DESCRIPTION OF SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE"

APPENDIX A

DESCRIPTION OF SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE"

(Summarized also as Scoring Procedure Chart)

A. WRITTEN EXERCISES

1. Sentence writing exercise: "Où est la gélinotte?"

Task: Answers are to be written to five questions about a picture in the test booklet.

Score: Use of prepositions

Area evaluated: grammatical competence

Scoring: The score is the number of errors of preposition usage (not spelling, but including omission of the preposition, wrong choice of preposition and incomplete preposition).

2. Technical exercise: Les activités quotidiennes"

Task: Students are to write a composition about daily camp activities based on a given schedule of activities.

Score 1: Word formation and grammatical spelling

Area evaluated: grammatical competence

Scoring: In the first 50 words, the number of misspelled grammatical forms involving number, gender or verb endings are marked; the score is the number of these marked errors which would not sound correct if spoken.

Score 2: Appropriateness of style

Area evaluated: sociolinguistic competence

Scoring: A rating of 1 is given if the student had consistently maintained a formal style by avoiding the use of 'je', 'tu', 'vous' and related pronominal forms. Otherwise a rating of 0 is given.

3. Composition exercise: "Décris ton ami"

Task: The student is asked to write a composition about one of the imaginary friends he/she has made at "le camp de la gélinotte"

Score 1: Variety of vocabulary

Area evaluated: grammatical competence

Scoring: The score is the number of different and appropriately chosen verbs, whether conjugated or in the infinitive.

Score 2: Sophistication of vocabulary

Area evaluated: grammatical competence

Scoring: The verbs counted above are compared with a list of commonly used verbs; the score is the number of verbs not on this list.

Score 3: Basic task fulfilment
Area evaluated: discourse competence
Scoring: Five points of information were to be included in the composition; the score is the number of these points which have been put across coherently (not necessarily without grammatical errors).

Score 4: Tense sequence
Area evaluated: discourse competence
Scoring: A count is made of the cases where the student has made an incorrect choice of tense; this is expressed as a per cent of the total number of conjugated verbs.

4. Cloze-test exercise: "Le camping"
Task: Students are asked to supply the missing words in a text from which every seventh word has been deleted.
This type of test gives a measure of overall language proficiency, including grammatical, sociolinguistic and discourse competence.
Scoring: The score is the number of blanks filled correctly. (To be counted as correct, the word must be the exact response expected.)

B. ORAL EXERCISES
1. Individual story-retelling exercise: "Le concours de pêche"
Task: Students individually listen twice to a short taped story, then retell it with the aid of pictures in their test booklet.
Score 1: Pronunciation
Area evaluated: grammatical competence
Scoring: Students are rated on a four-point scale according to their ability to produce certain French sounds:
0 - poor (many distortions, strong accent)
1 - fair (some distortions, medium accent)
2 - good (almost no distortions; little accent, but not entirely native-like
3 - native-like (no distortions; unlikely to be achieved by even the most fluent immersion students)

Score 2: Tense sequence
Area evaluated: discourse competence
Scoring: A count is made of the number of incorrect tenses used in the first 10 conjugated verbs; the score is the number of errors out of 10.

2. Group story-telling exercise: "Autour du feu de camp"
Task: A group of four students take turns adding one sentence at a time to a campfire story begun by the tester.
Score: Communicative strategies
Area evaluated: strategic competence
Scoring: The taped stories are listened to in order to determine whether a student who encounters a language-related communica-

tion problem generally abandons the message or uses a communicative strategy. Scoring is on a three-point scale:

2 - encountered no language difficulties in communicating

1 - has run into problems but in the majority of cases has resolved them by using a communicative strategy

0 - has encountered problems and in the majority of cases has abandoned the attempt to put across the message

During the scoring of the individual story-retelling exercise, a count was kept of the number of times each student abandoned the attempt to put across a message and of the number of times each of the following strategies was used:

(1) using an English word with an English pronunciation

(2) taking an English word and making it comprehensible by giving it a French pronunciation

(3) creating a new, but understandable, word for a word they do not know by applying their knowledge of a related word in French

(4) giving a literal translation of individual words in an expression for which they do not know the French equivalent

(5) using a word that does not suit the context in which it is or using a word whose pronunciation resembles that of the correct word

(6) finding a paraphrase or another way of putting across what they want to say

(7) using vague words such as "a person" or "a thing".

From the individual story-retelling exercise a score for fluency was also derived, using the following scheme developed by OISE:

0 - very slow elocution, jerky rhythm, poor accentuation (of word or sentence), pauses and/or hesitations which are very frequent and exceptionally long (fluency causing embarrassment or irritation)

1 - very slow elocution, irregular rhythm, errors of accentuation, many omissions of liaison, many long and frequent pauses and/or hesitations

2 - elocution a little slow, regular rhythm, few errors of accentuation and liaison, few pauses and/or long hesitations

3 - normal elocution, regular rhythm, accentuation and liaison usually correct, normal pauses and/or hesitations, adequate intonation (fluency similar to a native).

SCORING PROCEDURE CHART FOR "BIENVENUE AU CAMP DE LA GÉLINOTTE"

		GRAMMATICAL COMPETENCE		SOCIOLINGUISTIC COMPETENCE	DISCOURSE COMPETENCE	STRATEGIC COMPETENCE
		Vocabulary items	Rules of grammar & pronunication			
WRITTEN	Sentence writing		A: Use of prepositions (error count)			
	Technical exercise		B:Word formation and grammatical spelling ("oral" error count)	C: Appropriate-ness of style (2-point scale)		
	Composition	D: Variety of vocabulary (verb count) E:Sophistication of vocabulary (verb count)			F: Basic task fulfilment (check list) G:Tense sequence (error count)	
	H: Cloze test	Overall language proficiency (exact response scoring)				
ORAL	Individual story retell		I: Pronunciation (5-point scale)		J:Tense sequence (error count)	
	Group story telling					K: Communicative strategies (3-point scale)

APPENDIX B

CLASSROOM OBSERVATION INSTRUMENT:
COMMUNICATIVE ORIENTATION OF LANGUAGE TEACHING (COLT), PART A

COLT Observation Scheme (Part A)

SCHOOL _____ GRADE(S) _____ DATE _____

TEACHER _____ LESSON (Minutes) _____ OBSERVER _____

SUBJECT _____

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
TIME	ACTIVITIES	PARTIC ORGANIZATION							CONTENT																								STUDENT MODALITY					MATERIALS								
		Class			Group		Comb		Man		Language					Other Topics															Topic Control									Type							Use		
																Narrow				Limited					Broad																						
		T – s/c	S – s/c	Choral	Same	Different	Individual	Gr/Ind	Procedure	Discipline	Implicit	Form	Function	Discourse	Soc Ling	Classroom	Stereotyp	Pers/Bio	Other	Personal	Rout /Soc	Fam /Com	School T	Other	Abstract	Pers./Ref.	Imagination	World T	Other	Teacher	Teacher/Stud	Student	Listening	Speaking	Reading	Writing	Other	Text minimal	Text extended	Audio	Visual	Pedagogic	Semi-Pedag	Non-Pedag	High Control	Semi Control	Mini Control

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APPENDIX C

SUPPLEMENTARY FIGURES

FIGURE C-1

PATHWAYS OF STUDENTS IN FIRST MFI COHORT

(Note: Numbers in circles represent the number of students following that pathway.)

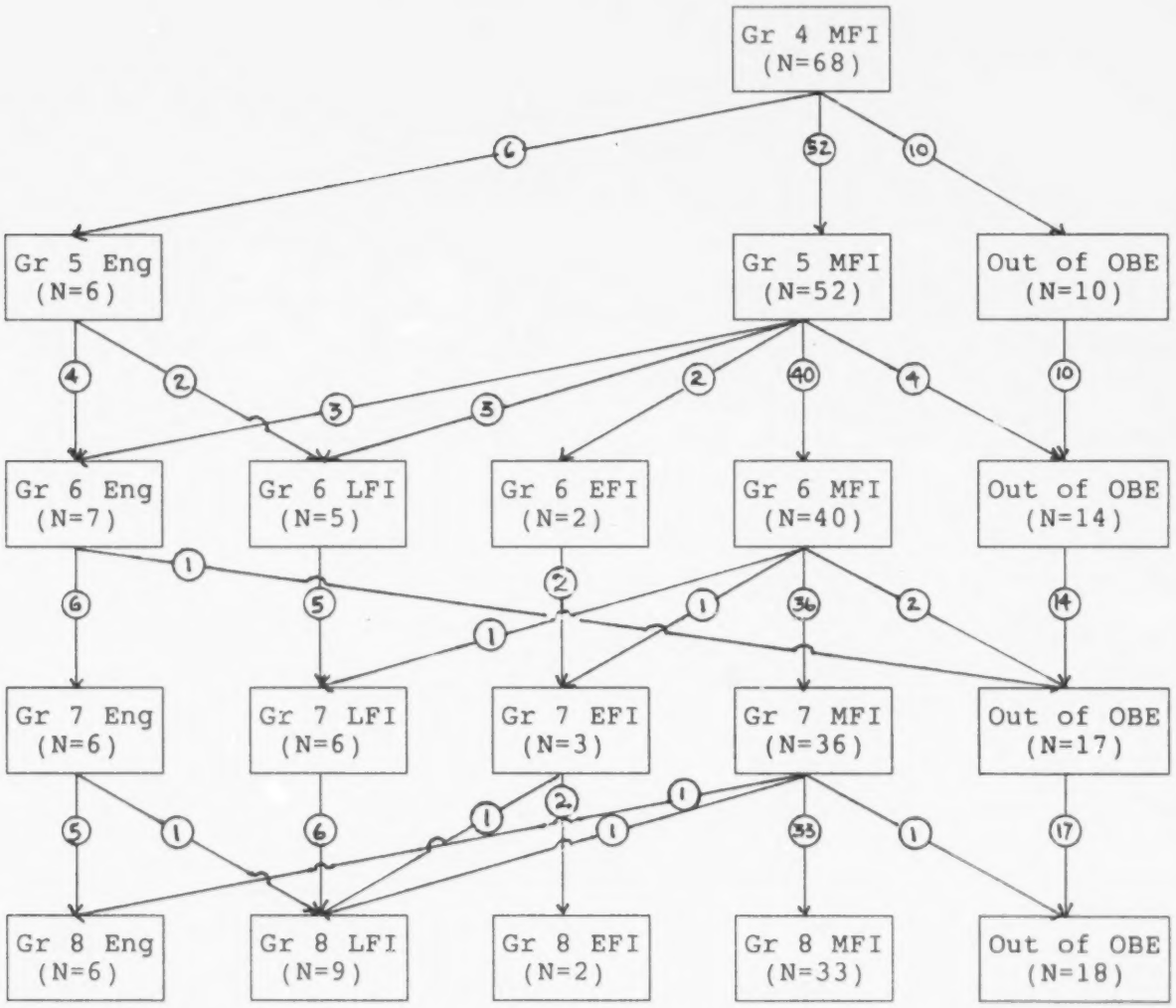


FIGURE C-2

PATHWAYS OF STUDENTS IN SECOND MFI COHORT

(Note: Numbers in circles represent the number of students following that pathway.)

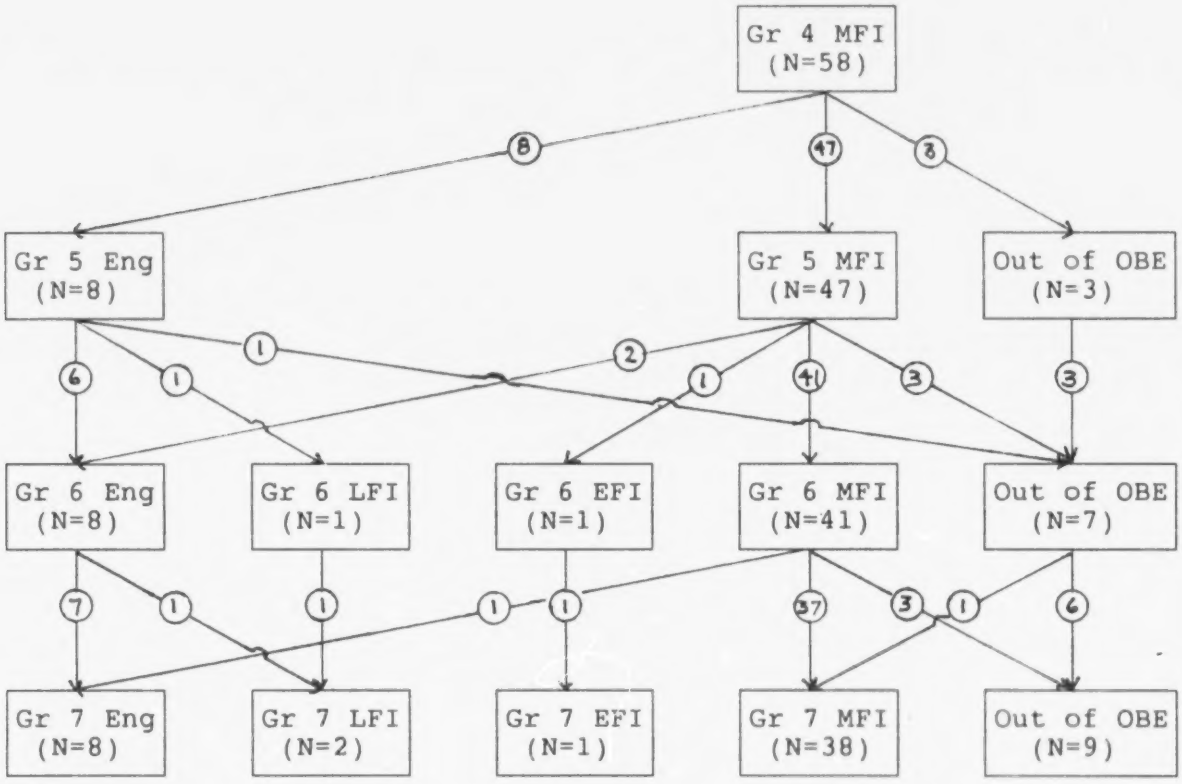


FIGURE C-3

PATHWAYS OF STUDENTS IN THIRD MFI COHORT

(Note: Numbers in circles represent the number of students following that pathway.)

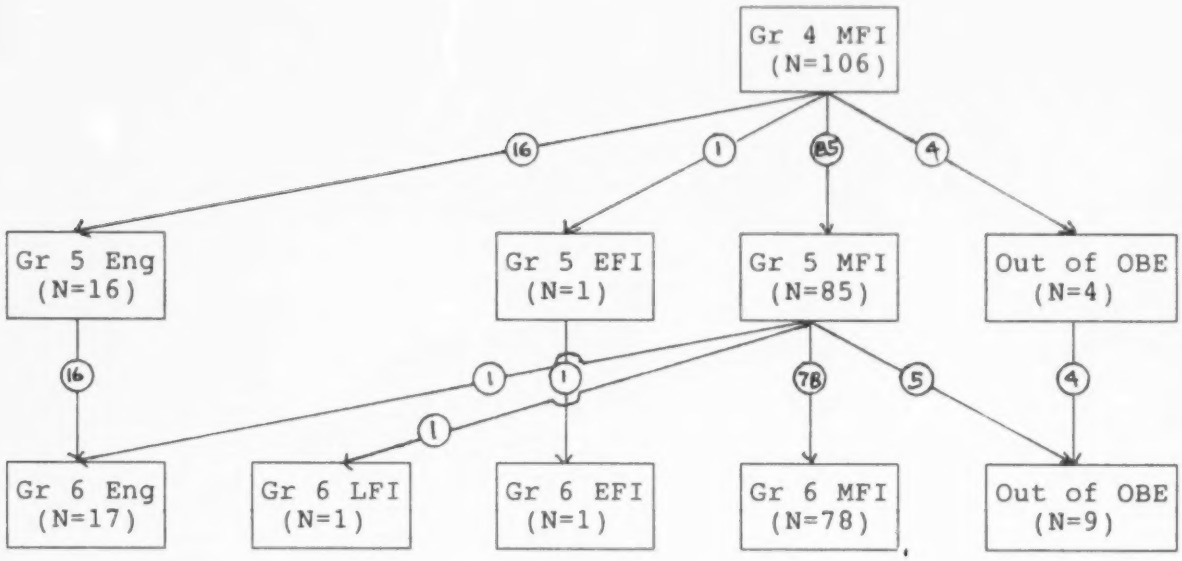
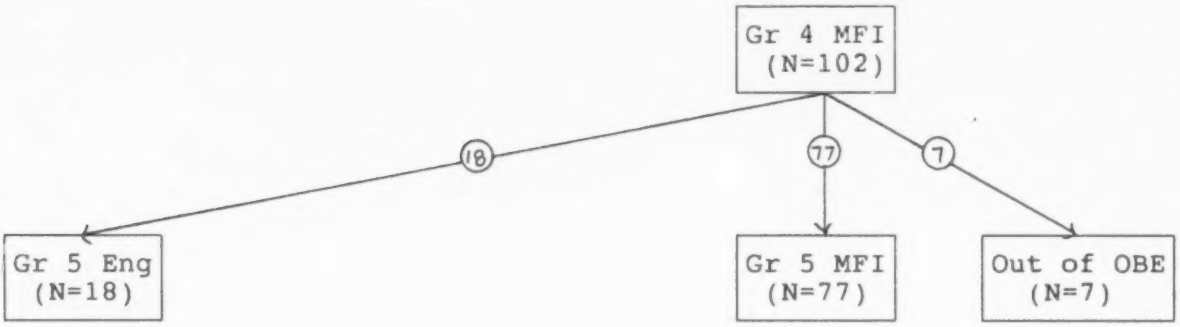


FIGURE C-4

PATHWAYS OF STUDENTS IN FOURTH MFI COHORT

(Note: Numbers in circles represent the number of students following that pathway.)



APPENDIX D

SUPPLEMENTARY TABLES

TABLE D-1

LOCATION OF STUDENTS FROM THE FIRST FOUR MFI COHORTS
AFTER ONE, TWO, THREE AND FOUR YEARS IN THE PROGRAMME

Cohort and grade	Percentage of cohort in programme/location				
	OBE MFI	OBE Eng.	OBE LFI	OBE EFI	Not in OBE
First cohort (N=68)					
Starting Grade 5	76.5	8.8	n.a	0.0	14.7
Starting Grade 6	58.8	10.3	7.4	2.9	20.6
Starting Grade 7	53.0	8.8	8.8	4.4	25.0
Starting Grade 8	48.5	8.8	13.2	3.0	26.5
Second cohort (N=58)					
Starting Grade 5	81.0	13.8	n.a	0.0	5.2
Starting Grade 6	70.7	13.8	1.7	1.7	12.1
Starting Grade 7	65.5	13.8	3.5	1.7	15.5
Third cohort (N=106)					
Starting Grade 5	80.2	15.1	n.a	0.9	3.8
Starting Grade 6	73.6	16.1	0.9	0.9	8.5
Fourth cohort (N=102)					
Starting Grade 5	75.5	17.6	n.a	0.0	6.9

TABLE D-2

PROPORTIONS OF OBE ENROLMENT IN ENGLISH-LANGUAGE SCHOOLS WHO CHOOSE IMMERSION AT KINDERGARTEN, GRADE 4 AND GRADE 6 1970 TO 1989

Year	Percentage of K enrolment in EFI	Percentage of gr 4 enrolment not in EFI who enter MFI	Percentage of gr 6 enrolment not in EFI or MFI who enter LFI
1970	4.7		
1971	16.0		
1972	17.9		
1973	19.3		1.9
1974	23.7		7.2
1975	30.0		8.9
1976	29.9		10.8
1977	28.4		9.8
1978	30.2		7.2
1979	31.4		8.6
1980	33.3		7.9
1981	33.6		7.9
1982	39.4		10.2
1983	38.5		8.7
1984	41.5		10.7
1985	41.8	6.3	15.3
1986	44.2	5.6	14.0
1987	45.4	10.1	15.4
1988	41.8	9.8	15.0
1989	40.4	9.7	13.4

TABLE D-3

MEAN SCORES BY PROGRAMME FOR CITY-WIDE READING TESTS, 1986 TO 1990

Test & yr	English Mean	English N	EFI Mean	EFI N	MFI Mean	MFI N	LFI Mean	LFI N
Gr 3 Gates-MacGinitie C: Vocabulary								
1986	33.1	942	35.7	440				
1987	33.6	941	35.6	445				
1988	32.2	916	35.0	529				
1989	32.2	915	33.9	529				
1990	32.2	966	34.5	518				
Gr 3 Gates-MacGinitie C: Comprehension								
1986	32.0	941	34.1	436				
1987	31.7	937	33.2	448				
1988	31.1	914	33.3	529				
1989	31.0	915	32.3	529				
1990	31.2	966	32.6	518				
Gr 6 Gates-MacGinitie D: Vocabulary								
1986	30.1	988	36.0	342	35.2	154		
1987	31.0	834	36.2	379	35.0	39	34.4	167
1988	28.8	857	37.5	396	34.3	41	34.1	149
1989	30.1	807	35.6	398	35.5	79	34.9	131
Gr 6 Gates-MacGinitie D: Comprehension								
1986	27.4	988	32.8	342			32.5	154
1987	27.8	834	33.0	379	31.3	38	31.9	168
1988	27.2	857	31.7	396	30.6	41	32.0	149
1989	27.0	807	32.0	398	32.5	79	31.1	131
Gr 8 Gates-MacGinitie E: Vocabulary								
1986	27.3	1168*	33.8	302			32.7	98
1987	27.3	1119	33.7	282			31.8	149
1988	27.2	973	33.0	326			32.1	154
1989	26.9	930	33.4	324	31.2	36	31.9	163
Gr 8 Gates-MacGinitie E: Comprehension								
1986	28.5	1168*	34.0	302			32.2	98
1987	28.4	1114	33.6	281			32.2	149
1988	28.0	973	33.5	326			32.6	154
1989	27.9	930	33.4	324	31.9	36	32.2	163

* Two classes of LFI students included with English programme

TABLE D-4

MEAN SCORES BY PROGRAMME FOR CITY-WIDE MATHEMATICS TESTS, 1986 TO 1990

Test & yr	English Mean	English N	EFI Mean	EFI N	MFI Mean	MFI N	LFI Mean	LFI N
Gr 3 OBE Mathematics#								
1986	39.1	946	42.6	444				
1987	41.5	932	43.4	441				
1988	41.6	904	43.9	532				
1989	41.3	963	43.6	542				
Gr 5 OBE Mathematics								
1985	29.1	1168	31.6	358				
1986	28.9	999	32.2	423	29.7	50		
1987	29.5	972	31.7	385	31.2	46		
1988	29.4	1032	32.4	407	31.1	90		
1989	29.2	979	33.9	413	33.2	113		
Gr 7 OBE Mathematics (Fall)##								
1986	24.6	1222*	30.7	289			29.4	136
1987	25.0	1074	29.4	311			29.2	158
1988	25.3	954	29.9	339	26.6	39	29.2	171
1989	28.1	817	29.6	405	29.2	39	30.3	156
Gr 7 OBE Mathematics (Spring)								
1987	25.1	1141	31.6	276			29.9	157
1988	26.0	1077	30.2	279			31.3	152
1989	26.1	915	28.7	329	28.8	37	28.2	160

* Two classes of LFI students included with English programme

Three versions of this test were used: one in 1986 (maximum 59), one in 1987 and 1988 (maximum 56), and one in 1989 (maximum 56)

@ This test was revised for the 1988 administration

TABLE D-5

MEAN SCORES BY PROGRAMME FOR GRADE 4 ABILITY TEST, 1990

Test & yr	English Mean	English N	EFI Mean	EFI N	MFI Mean	MFI N
CCAT Verbal						
1990	64.1	792	69.4	461	68.4	80
CCAT Non-Verbal						
1990	66.3	792	69.9	461	70.2	80

TABLE D-6

SEX OF GRADE 6 AND 8 SAMPLE GROUPS TESTED SPRING 1990

	Per cent: gr 6 groups EFI	MFI	LFI	Per cent: gr 8 groups EFI	MFI	LFI
Boys	42	46	49	47	28	44
Girls	58	54	51	53	72	56

TABLE D-7

BIRTHDATES OF GRADE 6 SAMPLE GROUPS TESTED SPRING 1990

Period	Per cent of group with birthdays in period EFI	MFI	LFI
Dec 77 or earlier	0.0	3.9	6.5
Jan 78 to Mar 78	29.8	19.5	15.2
Apr 78 to Jun 78	29.8	24.7	17.4
Jul 78 to Sep 78	27.6	27.2	17.4
Oct 78 to Dec 78	12.8	19.5	32.6
Jan 79 or later	0.0	5.2	10.9

TABLE D-8

BIRTHDATES OF GRADE 8 SAMPLE GROUPS TESTED SPRING 1990

Period	Per cent of group with birthdays in period		
	EFI	MFI	LFI
Dec 75 or earlier	6.3	2.9	7.6
Jan 76 to Mar 76	10.9	11.4	22.6
Apr 76 to Jun 76	28.1	42.8	24.5
Jul 76 to Sep 76	32.8	20.0	15.1
Oct 76 to Dec 76	20.3	22.9	20.8
Jan 77 or later	1.6	0.0	9.4

TABLE D-9

ENGLISH READING AND MATHEMATICS SCORES FOR GRADE 6 MFI GROUPS: OTTAWA BOARD OF EDUCATION, 1988 - 1990

Test and grade	1988			1989			1990		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Grade 3:									
Gates-MacGinitie C:									
Vocabulary	37.0	6.2	35	37.7	na	34	38.7	5.4	69
Comprehension	33.9	5.4	35	36.3	na	34	36.5	5.0	69
OBE Math 3/4	na	na	na	41.7	na	33	45.7	5.6	70
Grade 5:									
OBE Math 5/6	29.3	5.3	37	31.4	na	39	31.7	5.4	79
Grade 6:									
Gates-MacGinitie D:									
Vocabulary	34.9	6.7	38	35.0	na	40	35.5	6.6	78
Comprehension	31.2	6.8	37	31.0	na	40	32.5	6.6	78

TABLE D-10

ENGLISH READING AND MATHEMATICS SCORES FOR GRADE 6 EFI GROUPS: OTTAWA BOARD OF EDUCATION, 1988 - 1990

Test and grade	1988 Mean	1988 SD	1988 N	1989 Mean	1989 SD	1989 N	1990 Mean	1990 SD	1990 N
Grade 3:									
Gates-MacGinitie C:									
Vocabulary	36.8	6.6	40	33.8	na	46	37.1	5.4	44
Comprehension	36.1	5.7	40	32.6	na	44	34.8	6.0	45
OBE Math 3/4	na	na	na	40.2	na	45	43.8	7.9	46
Grade 5:									
OBE Math 5/6	31.7	7.4	43	30.6	na	47	32.9	6.4	43
Grade 6:									
Gates-MacGinitie D:									
Vocabulary	35.8	5.0	48	33.8	na	53	35.2	5.4	48
Comprehension	33.1	6.2	48	29.1	na	52	32.4	5.9	48

TABLE D-11

RESULTS ON SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE"
FOR GRADE 6 EFI GROUPS TESTED SPRING 1988, 1989 AND 1990

Competence and subtest	Type of score	1988 group Mean	SD	N	1989 group Mean	SD	N	1990 group Mean	SD	N
Grammatical competence										
Use of prepositions	No. errors	2.0	1.4	46	2.4	n.a	50	2.5	1.5	45
Grammat. spelling	No. errors	1.9	1.3	46	2.3	n.a	50	2.4	1.4	45
Variety vocabulary	No. verbs	10.0	3.7	46	11.0	n.a	50	11.1	3.0	43
Sophistication voc.	No. verbs	1.6	1.2	46	1.4	n.a	50	1.0	1.1	43
Pronunciation	Rating 0-3	1.2	0.5	47	0.7	n.a	51	2.0	0.7	21
Discourse competence										
Task fulfilment	No. tasks	4.0	1.0	46	3.9	n.a	50	4.0	0.9	43
Written tense seq.	% errors	10.4	16.4	46	10.7	n.a	50	18.1	15.8	43
Oral tense seq.	No. errors	1.4	1.1	47	1.2	n.a	51	1.0	1.1	21
Sociolinguistic competence										
Appropriate style	Rating 0-1	0.6	0.5	46	0.2	n.a	50	0.4	0.5	45
Strategic competence										
Communicative str.	Rating 0-2	1.0	0.0	46	1.0	n.a	52	1.0	0.2	46
Cloze test	Exact word	17.9	4.1	46	16.3	n.a	49	17.1	4.4	43
Fluency	Rating 0-3	1.1	0.7	47	1.5	n.a	51	1.7	0.7	21

TABLE D-12

RESULTS ON SUBTESTS OF "BIENVENUE AU CAMP DE LA GÉLINOTTE"
FOR GRADE 6 MFI GROUPS TESTED SPRING 1988, 1989 AND 1990

Competence and subtest	Type of score	1988 group Mean	SD	N	1989 group Mean	SD	N	1990 group Mean	SD	N
Grammatical competence										
Use of prepositions	No. errors	2.5	1.6	39	2.8	n.a	41	2.5	1.5	69
Grammat. spelling	No. errors	3.0	2.2	39	2.6	n.a	40	2.8	2.1	69
Variety vocabulary	No. verbs	12.3	3.7	39	11.0	n.a	41	9.9	3.1	72
Sophistication voc.	No. verbs	1.6	1.2	39	1.2	n.a	41	1.1	1.1	72
Pronunciation	Rating 0-3	1.2	0.5	39	0.3	n.a	40	n.a	n.a	na
Discourse competence										
Task fulfilment	No. tasks	4.0	0.9	39	4.0	n.a	41	4.2	0.8	72
Written tense seq.	% errors	22.7	17.9	39	19.6	n.a	41	23.4	17.5	73
Oral tense seq.	No. errors	2.9	2.0	39	2.4	n.a	40	n.a	n.a	na
Sociolinguistic competence										
Appropriate style	Rating 0-1	0.6	0.5	39	0.4	n.a	41	0.6	0.5	69
Strategic competence										
Communicative str.	Rating 0-2	1.0	0.0	39	1.0	n.a	40	1.0	0.2	72
Cloze test	Exact word	13.8	4.9	39	14.2	n.a	41	14.0	4.3	73
Fluency	Rating 0-3	1.0	0.7	39	1.0	n.a	40	n.a	n.a	na

TABLE D-13

RESULTS ON SUBTEST OF "BIENVENUE AU CAMP DE LA GÉLINOTTE" AND READING TEST BY SCHOOL FOR GRADE 6 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Test	Mean score for school						
	EFI-A	EFI-B	MFI-C	MFI-C	MFI-E	LFI-F	LFI-G
Grade 6 Reading:							
Vocabulary	36.6	33.8	31.9	36.1	36.3	35.8	35.8
Comprehension	34.2	30.6	28.5	32.0	34.2	32.5	30.0
"Bienvenue au camp de la gélinotte"							
Use of prepositions	2.7	2.2	3.2	2.8	2.2	1.9	3.5
Grammatical spelling	2.3	2.5	2.6	2.8	2.9	3.1	2.2
Variety of vocabulary	10.0	12.4	10.5	9.2	10.2	10.4	8.4
Sophistication of vocabulary	1.0	1.0	1.4	0.8	1.2	1.4	1.0
Pronunciation	2.0	n.a	n.a	n.a	n.a	0.9	n.a
Task fulfilment	3.9	4.1	4.2	4.0	4.4	4.2	4.0
Written tense sequence errors	21.5	14.5	24.2	32.0	17.7	24.4	34.9
Oral tense sequence errors	1.0	n.a	n.a	n.a	n.a	3.2	n.a
Appropriateness of style	0.4	0.3	0.7	0.6	0.6	0.4	0.7
Communicative strategies	1.1	1.0	1.0	1.0	1.0	1.0	1.0
Cloze test	16.9	17.4	12.5	13.7	14.8	11.9	11.2
Fluency	1.7	n.a	n.a	n.a	n.a	1.1	n.a

TABLE D-14

RESULTS ON SUBTEST OF "BIENVENUE AU CAMP DE LA GÉLINOTTE" AND READING TEST BY SCHOOL FOR GRADE 8 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Test	Mean score for school					
	EFI-A	EFI-B	MFI-C	MFI-D	LFI-D	LFI-F
Grade 8 Reading:						
Vocabulary	33.9	31.1	31.2	31.2	31.6	32.6
Comprehension	31.6	32.6	31.1	32.5	32.5	31.5
"Bienvenue au camp de la gélinotte"						
Use of prepositions	1.5	1.6	2.1	2.2	2.3	2.6
Grammatical spelling	1.9	2.4	2.0	2.2	2.0	2.7
Variety of vocabulary	11.8	12.1	11.2	15.6	8.4	12.4
Sophistication of vocabulary	2.0	1.7	0.8	2.1	0.7	1.7
Task fulfilment	3.6	3.9	3.8	3.9	3.9	4.1
Written tense sequence errors	9.7	9.7	14.8	15.8	24.4	27.0
Appropriateness of style	0.1	0.7	0.7	0.9	0.7	0.5
Communicative strategies	1.1	1.0	1.2	1.0	1.0	1.0
Cloze test	20.9	20.0	17.0	18.7	16.1	16.7

TABLE D-15

CORRELATIONS OF CLOZE TEST WITH OTHER MEASURES
OF FRENCH PROFICIENCY, ENGLISH READING, AND MATHEMATICS
FOR GRADE 6 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Measure	Correlation with cloze test score#		
	EFI	MFI	LFI
"Gélinotte" Subtests: Grade 6			
Preposition errors	-0.15 (42)	-0.34 (68)**	-0.32 (43)*
Grammatical spelling errors	-0.31 (42)	-0.28 (68)*	-0.29 (42)
Variety of vocabulary	0.14 (43)	0.16 (72)	0.40 (44)**
Sophistication of vocabulary	0.04 (43)	0.06 (72)	0.26 (44)
Task fulfilment	0.07 (43)	-0.03 (72)	0.43 (44)**
Written tense sequence errors	-0.15 (43)	-0.22 (72)	-0.30 (44)*
Gates-MacGinitie Reading Tests			
Grade 6: Vocabulary	0.43 (43)**	0.49 (72)***	0.44 (44)**
Comprehension	0.42 (43)**	0.55 (72)***	0.60 (44)***
Grade 3: Vocabulary	0.29 (39)	0.36 (65)**	0.39 (33)*
Comprehension	0.43 (40)**	0.33 (65)**	0.63 (33)***
Mathematics test			
Grade 5 OBE Math	0.26 (38)	0.23 (73)	0.30 (41)
Grade 4 French Tests			
OISE 1 Listening		0.17 (70)	
Tourond Reading: Pt 1		0.35 (73)**	
Pt 2		0.20 (67)	

\# Numbers in brackets are the number of cases on which the correlation was based

* Correlation significant ($p < 0.05$)

** Correlation significant ($p < 0.01$)

*** Correlation significant ($p < 0.001$)

TABLE D-16

CORRELATIONS OF CLOZE TEST WITH OTHER MEASURES
OF FRENCH PROFICIENCY, ENGLISH READING, AND MATHEMATICS
FOR GRADE 8 EFI, MFI AND LFI GROUPS TESTED SPRING 1990

Measure	Correlation with cloze test score#		
	EFI	MFI	LFI
"Gélinotte" Subtests: Grade 8			
Preposition errors	-0.23 (56)	-0.33 (32)	-0.58 (48)***
Grammatical spelling errors	-0.31 (56)*	-0.12 (32)	-0.22 (46)
Variety of vocabulary	0.04 (59)	0.23 (32)	0.15 (49)
Sophistication of vocabulary	0.22 (59)	0.32 (32)	0.20 (49)
Task fulfilment	0.14 (59)	-0.17 (32)	0.02 (49)
Written tense sequence errors	-0.26 (59)*	-0.25 (32)	-0.37 (49)**
"Gélinotte" Subtests: Grade 6			
Preposition errors	-0.02 (27)	-0.17 (29)	
Grammatical spelling errors	-0.43 (28)*	-0.24 (29)	
Variety of vocabulary	0.25 (30)	-0.06 (29)	
Sophistication of vocabulary	0.03 (30)	-0.01 (29)	
Task fulfilment	0.14 (30)	0.15 (29)	
Written tense sequence errors	-0.03 (29)	-0.13 (29)	
Cloze test	0.58 (30)**	0.75 (29)***	
French Listening: Grade 6			
Auditive A	0.42 (30)*	0.49 (29)**	
Gates-MacGinitie Reading Tests			
Grade 8: Vocabulary	0.31 (56)*	0.59 (32)***	0.31 (48)*
Comprehension	0.20 (56)	0.64 (32)***	0.41 (48)**
Grade 6: Vocabulary	0.41 (52)**	0.62 (28)***	0.29 (45)
Comprehension	0.35 (52)*	0.70 (29)***	0.43 (44)**
Grade 3: Vocabulary	0.21 (46)	0.51 (27)**	0.23 (29)
Comprehension	0.35 (46)*	0.53 (27)**	0.07 (29)
Mathematics tests			
Grade 7 OBE Math	0.39 (54)**	0.46 (32)**	0.19 (47)
Grade 5 OBE Math	0.26 (49)	0.28 (29)	0.31 (40)
Grade 4 French Tests			
OISE 1 Listening		0.18 (27)	
Tourond Reading: Pt 1		0.28 (27)	
Pt 2		0.41 (27)*	

\# Numbers in brackets are the number of cases on which the correlation was based
* Correlation significant ($p < 0.05$)
** Correlation significant ($p < 0.01$)
*** Correlation significant ($p < 0.001$)

APPENDIX E

DESCRIPTIONS OF CLASSROOM ACTIVITIES

APPENDIX E

DESCRIPTIONS OF CLASSROOM ACTIVITIES

LATE IMMERSION

Grade 6 - Class A

Lesson 1: Oral Composition. Students were shown an overhead transparency which contained four pictures in logical sequence. The teacher asked students questions concerning each of the pictures and one student was chosen to respond with either a phrase or a sentence. These phrases or sentences were written on the chalkboard, and subsequently edited orally by the students who were guided by the teacher. The final product was then presented to students as an oral reading exercise. A student would read the passage out loud until he or she made a mistake. The first student to read the entire story without a mistake won the game. The students were then told to copy the story in their notebooks and to study it that evening for a "dictée" to be given the next day.

Lesson 2: Class Discussion. Students were seated casually on the floor and the teacher presented a series of prints of paintings representing various styles and artists to the students. The discussion focused upon student likes and dislikes, as well as the nature of art. Considerable time was spent discussing the controversial Voice of Fire painting of the National Gallery of Canada.

Grade 6 - Class B

Lesson 1: Verb Tense Worksheet. Students and teacher discussed a worksheet which required putting the verb given in the infinitive in either the "passé composé" or the "présent". Students were asked to raise their hand to supply the answer and the responses were discussed.

Lesson 2: Play Reading and Discussion. A play reading activity required students to read a short play by taking roles. The play was discussed after the reading.

Grade 8 - Class A

Lesson 1: Grammar Lesson. This lesson involved an explanation by the teacher of how the subjunctive is formed and situations in which it is used. The explicit presentation was followed up by an exercise where students were asked to make up possible cases for using the subjunctive ("je veux que ...", "je suis content que...", etc.).

Lesson 2: Class Discussion. This lesson involved a teacher directed discussion of a novel that the class was in the process of reading. The teacher asked a number of questions related to the story content and students either volunteered or were called upon to give answers.

Grade 8 - Class B

Lesson 1: Grammar Lesson. This lesson began with a grammatical explanation of the formation of prenominal verbs. Examples were provided and students were asked to conjugate a prenominal verb on the chalkboard. These were corrected immediately by the teacher. An overhead transparency was shown depicting various actions which students were asked to describe by using a short sentence containing a prenominal verb. This was followed by a ten minute group-work session where students had to list 30 reflexive verbs.

Lesson 2: Watching and Discussing a Short Film. This lesson was built around the viewing of the video "Haut les mains" from Pour Tout Dire. The teacher began by asking students questions about their experiences at a bank, and by eliciting some vocabulary related to banking. The video was shown once and was followed by a ten minute discussion in the form of teacher-directed questions and one-sentence student answers (probing for vocabulary and precise descriptions of characters and action). Then there was a five minute small group discussion to come up with as many expressions used by the main character as possible. The first part of the video was seen a second time and a second five minute small group session was assigned for students to think of as many expressions as possible that the main character could have used. These were reported to the class.

MIDDLE IMMERSION

Grade 6 - Class A

Lesson 1: Small Group Discussions. Groups of about six students discussed a situation in a novel about a house which was about to be renovated. Each student played the role of one part of the house and argued for or against improvements based upon his or her personal situation. Each group had time to prepare their arguments and then presented these in the form of a debate before the whole class. This was followed by a whole class discussion of the issue wherein the entire class was asked to judge the best arguments for or against renovation.

Lesson 2: Group Oral Reading and Questioning. This lesson began with an explanation by the teacher of the day's schedule. There were three separate tasks which had to be completed by the end of the day and students were free to choose the order in which they would do these. The tasks all involved group work and the groups were established in advance for the week. The particular task which the researcher focused upon involved three different groups of students who sat around a table with the teacher. The students each had a copy of a novel they were studying and had to read a page from that novel and stop at any point and ask the others a question concerning what they had just read. Students were told that there was no restriction on the type of question - it could be related to content, form, spelling, etc.

Grade 6 - Class B

Lesson 1: Dictation and Field-trip Discussion. This lesson was divided into two activities. In the first, the teacher read a passage aloud, stopping to ask students to identify certain parts of speech, to spell certain verbs with the correct endings, to spell vocabulary items, and to give the infinitive of certain conjugated verbs. Following this, the passage was read as a "dictée" in short chunks, and then the entire passage was read in full. The second activity involved a discussion of a field-trip. Students were asked by the teacher to provide a number of adjectives which described the trip. The teacher insisted on full sentences, corrected students' errors with respect to grammar (verb conjugation), and asked students to reflect on why a particular form of the verb was used in a specific phrase.

Lesson 2: Discussion and Paragraph Writing; Play Reading and Discussion. This lesson involved two activities. The first was a discussion of what the students did on the weekend and what they planned to do at Easter, followed by a written exercise where students wrote a paragraph on the Easter topic. The second activity involved having the students read a short excerpt from a play silently, then taking roles and reading aloud. This was followed by a discussion of the play and an exercise where individual students were asked to paraphrase the words of a character.

Grade 6 - Class C

Lesson 1: Workbook Exercise and Oral Reading. This lesson involved two activities which lasted about 30 minutes each. The first was a grammar lesson where students read sentences out loud and then were asked by the teacher to identify the adjectives, to describe these in technical grammatical terms, and to identify the words they modified. The second part of the lesson involved the oral reading of a passage in a textbook. Students were asked by the teacher to define words found in the passage, to suggest synonyms, and to interpret the meaning of the sentence in which these words were found.

Lesson 2: Adverb Lesson and Class Discussion. This lesson involved a class on adverbs, and a discussion of Easter egg practices. The adverb lesson involved student analysis of adverbs in a workbook passage, and the Easter egg activity was a teacher directed discussion.

Grade 6 - Class D

Lesson 1: Reading and Verb Drill. This lesson involved two activities: (1) an oral reading of a passage in the student textbook and skimming of the passage for the main point regarding different types of stamp collections, and (2) a verb drill exercise which required students to give conjugations of verbs based upon descriptions such as "marcher - first person plural - present tense".

Lesson 2: Unavailable.

Grade 8 - Class A

Lesson 1: Textual Study/Class Discussion. This lesson involved the oral reading of a passage that had been read for homework. After a student had read a few sentences the teacher would ask the class probing questions concerning the passage. A free discussion on the topic of the passage was allowed before the end of class.

Lesson 2: Composition Writing. During this lesson students were in the process of writing a composition. The teacher circulated and responded to student questions or suggested reference material that would help them to complete their work.

Grade 8 - Class B

Lesson 1: Grammar Lesson. This lesson taught the "futur simple" tense. The teacher gave a formal presentation of the grammar point. Then an overhead was shown depicting different actions which students were asked to describe using the future tense. This was followed by a written exercise where students had to put the given verb in the future tense. This exercise was corrected orally. Students were asked what they planned to do during the holidays. This was answered by different students with a short sentence in the future tense.

Lesson 2: Unavailable.

EARLY IMMERSION

Grade 6 - Class A

Lesson 1: Class Discussion and Novel Study. There were two activities - a class discussion of what students did on the weekend and a novel study lesson.

Lesson 2: Class Discussion. This lesson involved a class discussion surrounding the theme of obedience and responsibilities at home. The teacher guided the discussion with questions and comments.

Grade 6 - Class B

Lesson 1: Oral Presentations and Paragraph Writing. This lesson involved oral presentations based upon a book that students had read. This was followed by work with a partner to revise a paragraph that the students had written. The students were asked to select their best sentence and this was written on the board as it was read. The teacher then engaged the class in a discussion of how these sentences could be improved - with respect to verb tense, synonyms that could make the paragraph more lively, adverbs, adjectives, etc. Students were then to revise another of their sentences individually in their notebooks.

Lesson 2: Group Review. This lesson involved a number of small groups - four to six students - reviewing various types of work that had been done.

Grade 8 - Class A

Lesson 1: Class Debate. This lesson involved a classroom debate on the topic of euthanasia. There was a student moderator who controlled the discussion. The teacher did not actively participate but observed from the back of the classroom.

Lesson 2: Dictation and Textual Study. This lesson involved two activities - a dictation of a previously seen passage which was corrected by peers, and the oral reading of a passage interspersed with teacher questions on content and vocabulary. A student would read a paragraph or two orally and the teacher would ask questions of individual students.

Grade 8 - Class B

Lesson 1: Project Preparation. This lesson involved students working in pairs on a project to be presented orally on a topic of their choice.

Lesson 2: Oral Presentations. This lesson involved the presentations prepared in the previous lesson. Students referred to cue cards and used visual aids - diagrams, maps, objects, etc. - in their presentations.

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